

RESEARCH

AT SULTAN QABOOS UNIVERSITY



1986-2009



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“ We have always emphasized the importance of science and scholarship and the need to keep abreast of the latest findings in these areas by every means possible. We can accomplish this only through keenly inquisitive minds engaging in deep reflection and thorough experimentation in order to seize what is beneficial and discard what is worthless. We want to encourage diligent researchers to continue achieving significant advances because, no matter how much effort is made, the outcome will remain a mere drop in the vast ocean of knowledge.”

- His Majesty Sultan Qaboos Bin Said, 2010.

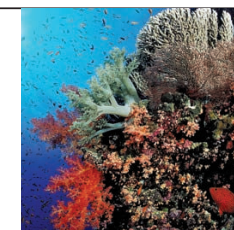


جامعة السلطان قابوس
Sultan Qaboos University

Research at
Sultan Qaboos University
1986 – 2009

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Foreword by the
**Minister of Higher Education and
Chair of Sultan Qaboos University Council**

Research is considered to be a key function of any university that aspires to achieve excellence and become recognized internationally. Accordingly, Sultan Qaboos University (SQU) has made global progress on many different fronts in the critical domain of research.

Royal Decrees have repeatedly stipulated research as one of the central functions of Sultan Qaboos University; and during his visit to SQU in 2000, His Majesty Sultan Qaboos bin Said stressed the importance of research and the key role that it plays in social and economic development. It is His Majesty's guidance that maps the future of research in the Sultanate.

As the national university of the Sultanate, since its inception in 1986, SQU has been committed to fulfilling its critical role in research and development. This is reflected in the University's research mission - *to develop a research culture and capacity, generate knowledge and find solutions for strategic issues in Oman*. The research objectives of the University focus on conducting research for the benefit of society, relating research to the nation's economic development plans, and training Omani researchers in various fields.

Over the past decade, SQU has made significant progress in becoming a major research institution. This has been achieved through strategic initiatives that include developing relevant organizational structures, allocating financial support, establishing a number of research centres and chairs, and introducing Doctoral programs. Established in 2001, His Majesty's Trust Fund has played a significant role in supporting research activities. SQU now has a research strategy for the period 2009-2013 that aims to raise the research profile of the University to international standards, while keeping the country's national strategic needs in focus.

Sultan Qaboos University has indeed become a House of Expertise and a hub for the dissemination of research knowledge, providing effective advice and producing quality manpower. The research activities of the University have resulted in many positive contributions to the development of the country and have greatly benefited Omani society.

We are pleased with the University's accomplishments in research to date and are confident that SQU will continue its efforts to develop and promote its research capabilities in order to achieve its vision of becoming an internationally recognized research-intensive university focused on both effective student learning and productive outcomes of national significance.

Dr. Rawya Saud Al Busaidi
Minister of Higher Education
Chair, Sultan Qaboos University Council



Foreword by the
Vice-Chancellor

Sultan Qaboos University has always considered research as one of its principal activities. After satisfactorily developing its undergraduate and postgraduate programs, the University began to pay special attention to its research programs, as these are considered a main pillar for postgraduate scholarship. Measures were adopted to establish a strong research base that would underpin the educational process, contribute to the Sultanate's social and economic growth, and add to global knowledge.

In 1999, the Deanship for Postgraduate Studies and Research was established. This in turn became the Office of the Assistant Vice-President for Postgraduate Studies and Research and finally, in 2006, the Office of the Deputy Vice-Chancellor for Postgraduate Studies and Research. Separate deanships for postgraduate studies and research were also created in 2006 and 2009 respectively. Research regulations, first developed in 2001, were revised in 2010. Postgraduate programs, including some at the Doctoral level, have been established, as have nine research centres and three research chairs in areas of strategic importance to the Sultanate.

An internal annual grant system was created in 1999 and, in 2001, His Majesty's Trust Fund was established to support strategic research that addresses the needs of the country. Joint research activities with the Ministry of Fisheries and the Ministry of Agriculture are also prominent sources of research funding. An agreement with the United Arab Emirates University marked the start of joint funding with external organizations.

In addition, the Research Council (TRC), established in 2005, has become an important source of funding, while engagement in procuring external grants and consultancy services has been ongoing since the early years of the University's establishment. Qualified faculty, researchers and technical staff have been recruited and the necessary infrastructure provided. For the period 2009-2013, the University has adopted a strategic plan to consolidate research activities and support the national strategy formulated by the TRC. The University is proud to be seen as the Sultanate's principal home of scholarship and expertise.

SQU has always been committed to the social and economic development of the nation and has positioned itself as its leading research provider. Though proud of our research output, we are committed to increasing it so that we can fulfil His Majesty's aspirations and become a truly outstanding centre of tertiary education and scholarship.

Dr. Ali Saud Al-Bimani
Vice-Chancellor
Sultan Qaboos University



**Foreword by the
Deputy Vice-Chancellor for
Postgraduate Studies and Research**

Sultan Qaboos University has provided all the essential ingredients for creating a sustainable research culture able to contribute to the country's development plans and to Omani society. As this report confirms, we have made good progress on all fronts over the past decade. However, our ambitions are lofty and we aspire to achieve even more under the vision and guidance of His Majesty Sultan Qaboos bin Said.

Realizing the importance of postgraduate studies for building a research culture, the University has been offering Master's programs since 1992 and a key recent development is the creation of Doctoral programs in four science colleges, with more soon to follow in the humanities colleges. These programs will provide essential research training for Omani students and help to build a strong research base not only at the University but also throughout the Sultanate.

All the factors controlling research productivity, including research management structures, funding schemes, qualified staff, state-of-the-art infrastructure, research regulations, electronic management systems, and research centres and chairs, have been provided and it is gratifying that our policy of encouraging research has already produced positive outcomes. However, far from resting on our laurels, we will continue to seek more funding opportunities, build more research partnerships with local, regional and international organizations, expand our network of research centres and chairs, and internationalize our research activities.

Prompted by a desire to maintain its acknowledged position in research, the University has prepared a medium-range strategic plan that charts its future path for the period 2009–2013. The plan outlines strategies for building research capacity and for nurturing research excellence to benefit Omani society. I am confident that our efforts will strengthen the University's prominent position nationally and raise its research profile internationally.

Prof. Amer Ali Al-Rawas
Deputy Vice-Chancellor for Postgraduate Studies and Research
Sultan Qaboos University



1 Introduction

Sultan Qaboos University is Oman's national university and its major research institution. Indeed, research has been strongly emphasized since the University opened in 1986. However, in the early years the primary focus was on establishing quality academic programs through excellence in teaching. Research was seen as a part of the overall learning process and student research projects became an important component in many degree plans. Meanwhile, all faculty members were aware that research was an important factor in their professional development and that research publications were essential for career progression. Hence, important research projects were conducted, despite faculty energies being primarily focused on establishing sound undergraduate programs. During this phase, research mainly depended on individual motivation and facilities available within the teaching environment.

The process of establishing an administrative structure for research commenced in 1999 with the formation of the Deanship of Postgraduate Studies and Research (DOPSAR). This office was restructured in 2001 under the Assistant Vice-President for Postgraduate Studies and Research (AVP-PSR). With the expansion of research activities and postgraduate programs, a corresponding increase in administrative services was needed and this was achieved by establishing the office of the Deputy Vice-Chancellor for Postgraduate Studies and Research (DVC-PSR) in 2006. In 2010, a separate deanship for research was created to become responsible for administering all aspects of research throughout the University. This office is now responsible for realizing the research objectives stated in the revised University Charter (71/2006), which are to:

- conduct basic and applied research and studies for the benefit of society and in particular seek scientific and practical solutions to economic and social problems
 - relate research and studies to overall development plans and the future vision of the Omani nation, and prepare generations of Omani researchers, experts and scientists in various branches of science, arts and humanities who are capable of systematic and creative work
- The process of achieving these objectives has been well under way since the
- establishment of diverse research-based postgraduate programs, starting in 1992
 - formulation in 2000 of the guidelines for grants, contracts and consultancies
 - provision of research funds through various sources, starting in 1999
 - appointment of assistant deans for postgraduate studies and research in each college starting in 1997
 - establishment of research centres and chairs starting in 1998
 - promotion of research collaboration with external agencies
 - creation in 1999 of a deanship for postgraduate



studies and research, which in 2009 was split into separate deanships for postgraduate studies and research

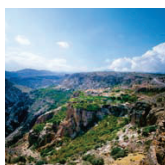
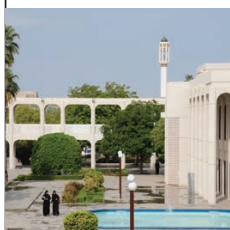
- provision of postgraduate scholarships in 2007
- development of a University strategic plan (2009-2013) and a comprehensive separate strategic plan for research (2009-2013)

At present, SQU, as Oman's premier university, offers unrivalled research leadership in the Sultanate. The majority of internationally recognized research and research publications are generated here. SQU is indeed a powerhouse of research scholars and students, continuously expanding its facilities and acting as a hub for disseminating research knowledge.

Prompted by a desire to continue its leading role in

the Sultanate's higher education system, maintain its acknowledged position in the teaching and research process, and meet changing needs in social development, SQU has prepared a medium-range strategic plan that outlines its future path for the period 2009–2013 and forms the basis of a long-term strategic plan which is already underway. The plan's aim is to bring to fruition the vision of His Majesty Sultan Qaboos bin Said, which is reflected in the following statement: *"We want this university to be an outstanding university ... a university that we can be proud of ... a university that we can glorify."*

The present report, *Research at Sultan Qaboos University 1986-2009*, sheds light on research policies and strategies, research infrastructure, research centres and chairs, funding and research areas, postgraduate studies and research, and academic publications.



2 Research Governance and Strategy

2.1 The Deputy Vice-Chancellor for Postgraduate Studies and Research

Research at SQU is headed by the Deputy Vice-Chancellor for Postgraduate Studies and Research (DVC-PSR). The current organizational chart is shown below (Fig. 1).

The DVC-PSR chairs three boards. These are the Board of Postgraduate Studies, the Board of Research, and the Academic Publications Board. The Board of Postgraduate Studies is composed of the Dean of Postgraduate Studies, the Dean of Admissions and Registration, Assistant Deans for Postgraduate Studies and Research in the colleges, and two faculty mem-

bers at the level of associate professor or above appointed by the DVC-PSR for a period of two years. The Board of Research has two other Deputy Vice-Chancellors, the Dean of Research, two Assistant Deans for Postgraduate Studies and Research from the colleges, appointed by the DVC-PSR for a period of two years, two faculty members at the level of associate professor or above appointed by the DVC-PSR for a period of two years, two Directors of Research Centres appointed by the DVC-PSR for a period of two years, and the Directors of Research and Innovation Affairs at the Deanship of Research.

These boards formulate the criteria necessary for maintaining the academic standards of postgraduate studies and

research, set future plans, propose and periodically review postgraduate and research regulations, and express views on budget estimates and annual reports on postgraduate studies and research. The boards may form sub-committees from within or outside their membership and may also seek the assistance of other experts in performing their duties.

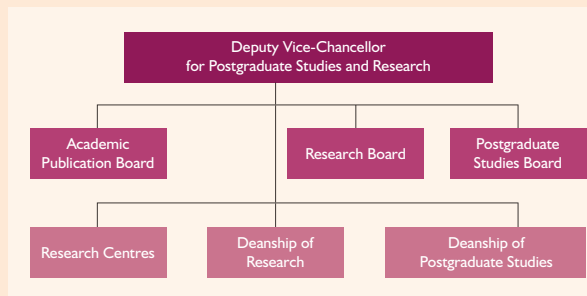


Fig. 1 – Organizational structure of research at SQU

The Academic Publications Board was established to develop and review scientific manuscripts submitted to University journals. Its members are the editors-in-chief of SQU's journals, the Dean of Research, and the Director of Academic Publications and Outreach. The Academic Publications Board formulates the rules and guidelines governing the publication of a whole range of scientific journals and edited or translated books. It aims to enrich scientific and cultural knowledge in all the academic fields supported at SQU.

2.2 The Deanship of Research

The Deanship of Research takes responsibility for the administration of all aspects of research at the University

(Fig. 2). Its vision is to facilitate the development of a vibrant research culture, thereby making the University a leading research institution in the region. Under the guidance of the DVC-PSR, the Deanship will contribute to the enhancement of SQU's research culture and productivity through

conference attendance by faculty, and the important task of linking society and scientific research through outreach activities involving visual and print media are among the duties of the Academic Publications and Outreach Department. All functional units are effectively coordinated by an admin-

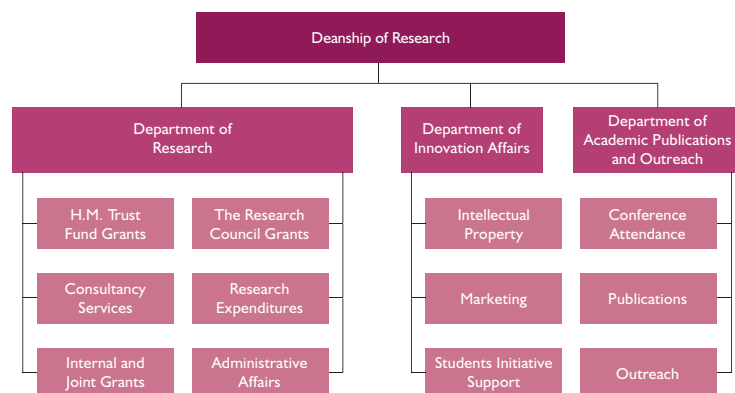


Fig. 2 – Organizational structure of the Deanship of Research

the following: (i) strategic planning and policy formulation in relation to building research capacity and performance; (ii) monitoring research and research training activity and performance; (iii) implementing policies and practices designed to improve research capacity and performance; (iv) providing regular feed-back to the DVC-PSR about issues relating to research; (v) fostering activities designed to promote research output and outcomes nationally and internationally; (vi) liaising with the Research Council; (vii) encouraging research leading to innovation and entrepreneurship; and (viii) raising external funding to support research at the University.

The Deanship has three departments: Research, Innovation Affairs, and Academic Publications and Outreach. Six research funding schemes (Internal Grants, Joint Grants, His Majesty's Trust Fund Grants, Research Council Grants, External Grants, and Consultancy Services) are administered by the Research Department, while the Innovation Affairs Department is responsible for supporting research innovation, technology transfer, and the protection of intellectual property. The publication of scholarly books and scientific journals, the administration of

istrative office located in the Deanship to manage such matters as finance, audit and procurement.

2.3 Research Centres

There are nine research centres at SQU, all directly under the DVC-PSR. Their organizational structure is shown in Fig. 3. Program coordinators in these centres work with

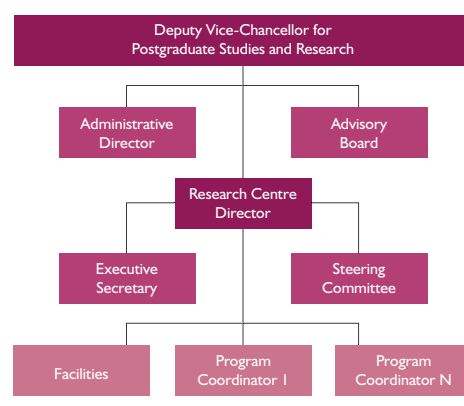


Fig. 3 – Organizational structure of Research Centres



academic and technical staff, researchers, postdoctoral fellows and postgraduate students as appropriate.

2.3.1 The Remote Sensing and Geographic Information Systems Centre (RSGIC)

Table 1 provides a list of Research Centres at SQU, their dates of establishment and key objectives. All centres play an important

The vision of the Remote Sensing and GIS Centre involves manpower development which will lay the

Table 1 : List of Research Centres

Centre	Year	Key Objectives
Remote Sensing and GIS Centre (RSGISC)	1998	To educate and ensure the use of geospatial information for effective decision making and better understanding to improve the quality of life
Omani Studies Centre (OSC)	1998	To preserve cultural heritage through research, documentation and cultural symposia and provide high quality education
Centre for Environmental Studies & Research (CESAR)	2000	To raise awareness on environmental issues; to help protect and maintain natural resources through environmental initiatives and research
Earthquake Monitoring Centre (EMC)	2001	To monitor earthquakes in and around the Sultanate; to assess the seismic hazards and determine their characteristics and effects on civil constructions
Communication and Information Research Centre (CIRC)	2001	To promote and enhance information and communication technologies in the Sultanate through applied research, consultancy and training
Oil and Gas Research Centre (OGRC)	2002	To form a foundation to upgrade pedagogy, research and services in the oil and gas sector.
Water Research Centre (WRC)	2002	To conduct high quality research on strategic water related issues by coordinating research facilities and expertise in SQU, national and international institutions
Centre for Excellence in Marine Biotechnology (CEMB)	2004	To build an accredited marine biotechnology research centre and create opportunities to utilize marine raw materials and promote public health
Humanities Studies Centre (HSC)	2004	To promote research in humanities and social sciences relevant to the nation

role in coordinating research at SQU and throughout the Sultanate. As mandated by their strategic plans, these centres are continually evolving to reach their full potential as research institutions with their own infrastructure, staff and funding, from where major research projects can be launched. Some centres have already established leadership in specific areas. Examples are microbial enhanced oil recovery (OGRC), conservation and sustainable development, mountain systems (CESAR), desalination research and wastewater re-use (WRC), and Oman climate study (RSGISC).

foundation for effective research and for teaching Remote Sensing and GIS courses at SQU. The RSGISC is establishing itself as a centre of excellence in the Sultanate and the region and has developed partnerships with industry and government agencies. The objectives of the Centre are to:

- develop and teach undergraduate and postgraduate courses in Remote Sensing and GIS
- enhance awareness and use of GIS within SQU, government ministries, and industry
- promote interdisciplinary research and projects using Remote Sensing and GIS
- seek and execute projects from national and international funding agencies
- organize thematic short courses in Remote Sensing and GIS for the public and private sectors
- organize seminars, symposia, workshops and conferences
- facilitate interaction between ministries and private companies and eventually form national user and interest groups in Remote Sensing and GIS

The Centre teaches undergraduate and postgraduate courses in Remote Sensing and GIS in the Department of Earth Sciences and in the Department of Civil and Architectural Engineering. The Centre also supervises Master's and Doctoral theses in these departments. The Department of Civil and Architectural Engineering, in collaboration with the Department of Electrical and Computer Engineering and the Remote Sensing and GIS Centre, has created a Master's Program in Geomatics Engineering. The Centre has also collaborated with scientists at SQU in completing six research projects between 2002 and 2009. The Centre serves as the World Meteorological (WMO) Centre of Excellence, which is coordinated by the Directorate General of Meteorology and Air Navigation (Civil Aviation Affairs) and the SQU Remote Sensing and GIS Centre. Some 150 weather forecasters and environmental specialists from Arab and Southwest Asian

countries have been trained since the establishment of the WMO Centre of Excellence in Oman in 2006.

2.3.2 The Omani Studies Centre (OSC)

In a globalizing world, preserving a people's identity and culture becomes an urgent priority. This ensures a country's link with its past achievements and future aspirations. The Omani Studies Centre was established with this concern in mind. Providing modern scientific and academic knowledge and teaching an understanding of the historical, cultural and social specifics of Oman are among the valuable services that SQU offers to Omani society and the world. The OSC's mission is to conduct and support research, provide consultancy services, and to document, preserve and disseminate knowledge on Omani society, culture and heritage. The Centre also works with relevant local and international institutions to promote research and studies on the Sultanate of Oman. The objectives of the Centre are to:

- conduct studies on arts and culture as requested by any governmental institution
- respond to the developmental needs of Omani society and the University
- collect and document studies on the history of SQU from its origins to the present
- contact and cooperate with international universities and cultural institutions conducting research on Oman



Omani Studies Centre



Sultan Qaboos University Cultural Centre

- support and promote research on Omani studies
- collect and document Omani manuscripts of social, cultural and scientific value
- collect and document Oman's literary traditions, heritage and folk art

The Centre has published a number of books, such as *The Cultural Intercommunication Between Oman and Northwest Africa*, *His Majesty's Visit to SQU: Honour and Exalt*; *The Effectiveness of the Criteria for the Centres for Learning Resources and Technology*; and *An Annotated Bibliography of Omani Folk-Tales*. The Centre has organized several symposia and seminars, including the following: The Endowment Symposium (18-20 October 2009), The Properties of Omani Culture (15 December 2009). Major research projects in progress include "The Al Jabal Al Akhdar Study", a collaborative project with the Ministry of Tourism, and "Omani Traditional Tales".

2.3.3 The Centre for Environmental Studies and Research (CESAR)

The Centre envisages conducting research, raising awareness on environmental issues locally, regionally and globally, and helping various governmental agencies and other stakeholders to protect and sustainably manage the nation's natural resources through planned initiatives and research. Work at the CESAR has also been directed at influencing policy and strengthening institutional support. The Centre actively contributes

to local thinking and provides intellectual input on sustainable development issues. More specifically, its main objectives are to:

- gather data on all environmental research projects done inside and outside SQU
- set up a database to receive input and share information among all sectors involved in environmental research
- promote interdisciplinary environmental research within the University
- facilitate interaction between government ministries, international agencies and the private sector in order to carry out environmental research
- seek internal funding from the University for environmental research
- seek and administer outside funding for environmental research and teaching programs
- organize seminars, symposia, workshops and conferences on environmental issues
- publish digests, directories, conference proceedings and special issues of SQU journals
- create awareness of environmental issues among school and university students and the general public by way of the mass media and special activities

CESAR has taken many steps since its inception to fulfil its mission and objectives. Its activities have included an integrated research project on mountain ecosystems; a study of thermal springs; a study of environmental awareness among Omani people; maintaining and updating the Oman bird database; publication of books and environmental research directories; holding environment-related workshops, seminars, and international conferences; and providing consultancy and advisory services. One of the most significant and pioneering research projects, on Al Jabal Al Akhdar, was started by CESAR in 2004 with funding from His Majesty's Trust Fund for Strategic Research. The project was completed in 2007 and an international conference on mountains of the world was organized in 2008. At present CESAR is focusing its research energies on climate change and adaptation strategies.

2.3.4 The Earthquake Monitoring Centre (EMC)

The mission of the Earthquake Monitoring Centre (EMC) is to operate, manage and develop the national earthquake monitoring program and to conduct and coordinate multidisciplinary research activities within the University. The EMC is responsible for monitoring earthquakes that occur in and around the Sultanate. There are many seismic stations located in different parts of the country which help with assessing earthquake risk by locating seismic zones and determining their characteristics and implications for all types of civil structures. The EMC has also developed an earthquake awareness program for schools and universities. Its main objectives are to:

- carry out the national monitoring program that involves the installation of seismic stations in selected localities according to geological and tectonic indications
- manage the running of the earthquake network and carry out required developments and updates
- conduct necessary data analyses and evaluate all recorded earthquakes
- publish seismological data and exchange them with institutes inside and outside Oman
- provide planners and structural engineers with seismological findings and participate with them in developing necessary measures for the mitigation of earthquake hazard, including the preparation of building codes
- exchange data with related Arab and international seismological institutes
- prepare workshops, seminars and conferences on seismology and seismic hazard
- provide and seek advice on seismological science wherever appropriate

The Centre has developed several courses and participates in teaching at the Department of Earth Sciences. B.Sc. and M.Sc thesis projects from this department are also supervised by the Centre. Lectures to students and student societies are given as and when



EMC Laboratory



Earthquake Monitoring Station



Earthquake Monitoring Centre

requested. Well over 1000 K-12 students receive instruction from the Centre annually. The Centre also undertakes research projects with Petroleum Development Oman (PDO) and other regional and international organisations. Major activities include the following: The Seismic Hazard Assessment (SHA) Project, 2009-2011; The Yibal Microseismic Project, 2008-2009; and Completion of the Comprehensive Nuclear Test Ban Treaty Organization (CTBTO) seismic station at Wadi Sarin, 2004. The Centre produces an annual earthquake bulletin distributed to appropriate government agencies and institutions.

2.3.5 The Communication and Information Research Centre (CIRC)

Establishing the Communication and Information Research Centre represents the first phase of what is expected to become a fully-fledged National Information and Communication Research Centre, providing R&D services to both the government and the private sector in respect of Information and Communication Technology (ICT). CIRC's mission is to promote and improve information and communication technologies through applied research and development, consultancy and training. These goals will be achieved by developing and maintaining strong relationships with industry, ministries, and educational organizations, both nationally and internationally. Its main objectives are to:

- participate in product prototype development
- evaluate ICT technologies, services, products and policies
- raise awareness of information and communication technologies
- contribute to sustainable technology transfer in the Sultanate
- provide training through short courses, seminars and workshops
- conduct applied research
- provide consultancies

In addition to its premises at SQU, CIRC also has an office on the premises of Knowledge Oasis Muscat (KOM) to facilitate interaction with industry. Its main areas of research focus on Communication, Database and Information Systems, Multimedia Development, Artificial Networks and Intelligence, Computer Hardware Design, Computer Networks (wired, wireless and optical), High Speed and Broadband Communication, Software Engineering, Application Software, Network Security, Electronic Commerce and Business, Robotics and Automation, Digital and Analog Electronics, Information Systems Management, Sensors Network, Internet Computing, and Web Services.

2.3.6 The Oil and Gas Research Centre (OGRC)

The main aim of the Centre is to conduct research in areas pertaining to the oil and gas industry. In addition, the Centre seeks to enhance practitioner professionalism



in the industry through development programs, including short courses, conferences, workshops, seminars and specialized lectures. Its mission, for the benefit of the oil and gas industry in Oman, and for society at large, is to conduct quality research in areas vital for the effective development of the oil and gas industries, while exploiting the state-of-the-art research facilities currently available. The main objectives of the Centre are to:

- develop the Centre as an independent organization that is financially self-sufficient
- develop a state-of-the-art facility, program and research laboratories
- provide quality research, consultancy and community services
- establish partnerships and collaboration with key local, regional and international institutions

Over the last seven years, the Centre, in cooperation with researchers in the Colleges of Engineering, Science, and Agricultural and Marine Sciences, has carried out more than 50 major research projects covering different aspects of the oil and natural gas industries. Diverse areas are included such as hot water injection, surfactant injection, formation damage, expandable tubular, multi-

phase metering, the modeling of hydrocarbon basins, and exploration of Oman's surface and subsurface geology. So far the Centre has secured projects to a value of about RO 800,000. A central commitment is to combine the expertise available within recognized research groups in order to foster synergism, continuity and sustainability. The Centre has succeeded in institutionalizing its research efforts for the oil and gas industry in order to provide a cohesive response to problems and ensure a long-term focus on technology development.

2.3.7 The Water Research Centre (WRC)

The Centre envisages becoming a convening location where water professionals in Oman and elsewhere can conduct research, provide continuous education in water-related academic disciplines, and disseminate knowledge. To achieve this, the Centre plays a vital role in coordinating research facilities and expertise at SQU and at other national and international institutions. It also strives to effectively disseminate research findings to the public and private sectors and to the community at large. Key objectives are to:

- identify water-related research challenges in Oman and secure research support funds from public and private sources
- secure consultancy opportunities for SQU faculty with the public and private sectors
- encourage SQU researchers to initiate and carry out water research
- expand student training in water-related fields with the private and public sectors
- initiate and participate in the organization of national and international seminars, conferences, symposia, workshops, and short courses on water issues
- build a database of information around water-related issues
- maintain a series of publications that synthesize and report on water policy, science, and engineering issues



Research at the Centre focuses on agricultural water management, desalination, groundwater hydrology, and the socioeconomics of water resources management. The Centre has hosted international researchers from the USA, Japan, Italy, Pakistan, Tunisia, and the Netherlands. Annually, World Water Day is hosted jointly by the Ministry of Regional Municipalities and Water Resources and the Centre. Furthermore, the Centre each year conducts one or more short courses for personnel in the public and private sectors. It maintains an e-list called WRCINFO, which is a platform for delivering water-related news, including conference announcements and research papers, to over a hundred recipients in Oman. A Research Chair in the Nanotechnology of Water Desalination, funded by the Research Council, is being established at the Centre.

2.3.8 The Centre of Excellence in Marine Biotechnology (CEMB)

The Centre focuses on capacity building and plans to make optimal use of Oman's marine resources so that development is sustainable, thereby encouraging future growth and prosperity. Since its inception in 2004, the Centre has been working on research projects that will create opportunities for utilizing marine raw materials and thus promote public health. Its main objectives are to:

- promote development of science and technology initiatives in marine biotechnology
- bridge the gaps between basic and applied research and facilitate interdisciplinary efforts
- establish a regional and international network of collaborating universities, government and other relevant institutions
- increase competitiveness, create business opportunities, and attract capital
- create a sustainable development of marine bio-resources
- contribute to the development of the fisheries and aqua culture industry



- disseminate information to industry and the general public

The CEMB has published several research papers in international journals, in addition to theses. Information on the development of Oman's marine biotechnology is continually shared with the public through bilingual newspapers and magazines published nationally, regionally and internationally. An extensive feasibility study in 2009 recommended the establishment of a National Centre of Excellence in Marine Biotechnology to serve as a regional hub. The Centre is currently playing a major role in this proposed project.

2.3.9 The Humanities Research Centre (HRC)

The mandate of the Humanities Research Centre is to play both a proactive and supportive role in relation to existing humanities studies in Oman. The Centre's mission is to



explore disciplines, topics and problems that are in need of a specific national focus and to conduct research in the areas of Social Science, Education, Business, Economics, and Law. The main objectives of the Centre are to:

- initiate surveys and conduct empirical research on social, educational and business phenomena that accompany the processes of change, development and modernization in contemporary Omani and Arab society
- build a national social sciences and humanities dossier for the benefit of future researchers
- conduct social research programs requested by international, non-governmental and business organizations

- initiate evaluation studies on the practice and theory of management research and administration, and social programs and policies, with a view to assessing performance appraisal and quality

- strengthen collaborative ventures between the University and outside partners, especially by supporting and actively encouraging inter-disciplinary and multi-disciplinary research

The Centre is currently involved in preparing its operational strategy and is also organizing research projects of strategic importance.

2.4 Research Chairs

There are three Research Chairs at SQU for specific specializations. The UNESCO Chair in Marine Biotechnology, housed at the Centre of Excellence in Marine Biotechnology, was established in 2003, and the Shell Chair in Carbonate Geosciences, located in the Oil and Gas Research Centre, was established in 2007. The Research Council (TRC) Chair in Nanotechnology for Water Desalination was established in 2010.

2.4.1 The UNESCO Chair in Marine Biotechnology

The purpose of the Chair is to promote an integrated system of research, training and information in the field of advanced marine biotechnology. Within the strategy for capacity building in Marine Biotechnology, the UNESCO



Readings taken at Desalination Station



Al Hail Desalination Station

Chair holder in 2004 submitted a proposal to establish a Centre of Excellence for Marine Biotechnology (CEMB) in Oman. In 2005, SQU's University Council approved the establishment of the Centre and the UNESCO Chair holder became its Director. The CEMB functions as an embryo for a larger National Centre, a regional hub now being developed in line with the UNESCO Consultative Meeting and Workshop recommendations of 2006. The Chair holder has developed an integrated research program in Marine Biotechnology, involving a 35-member research team from the Colleges of Agricultural and Marine Sciences, Medicine and Health Sciences, and Science. The program is at the forefront of research performed in collaboration with a network of international partners. Several research papers have already been published in international journals. Furthermore, the Chair holder has introduced three new postgraduate courses - Marine Biotechnology, Functional Foods, and the Molecular Biology of Nutrition - as part of its capacity building strategy.

2.4.2 The Shell Chair in Carbonate Geosciences

The Shell Chair in Carbonate Geosciences, established in 2006 as a joint venture between SQU and Shell International, is located in the Oil and Gas Research Centre. It supports the goals of the OGRC by leading the development of research and training programs with a particular emphasis on carbonate reservoir characterization and modeling. Research areas include carbonate reservoir characterization and the prediction of carbonate reservoir quality, with a focus on applications to enhanced oil recovery and subsurface CO₂ sequestration. The Chair



holder will contribute to the teaching of advanced courses in carbonate geoscience areas such as Petroleum Geology of the Middle East, Carbonate and Sandstone Reservoir Quality, and Carbonate Core Description. Postgraduate programs in Carbonate Studies are also included.

2.4.3 The Research Council Chair in Nanotechnology for Water Desalination

The Chair is jointly sponsored by The Research Council (TRC) and SQU. Both sponsors are committed to remaining at the cutting edge of Nanotechnology both for desalination and other applications. The main aspiration is to raise the Sultanate to the position of a world-class leader in research and training in the development of nanomaterials. Focusing on niche applications of relevance to SQU's core competency and the country's strategic

development, the program's mission is to accelerate the all-round development of Oman using leading edge nanotechnologies. The Chair will be committed to capacity building in all its areas of concern. The main objectives of the proposed research are to:

- engineer nanomaterials with atomic precision for applications in desalination and water purification
- investigate mono- and bi-metallic subnanoparticle formation within micro channels, using time-resolved in situ spectroscopy, leading to the development with atomic precision of wet-chemical synthesis of subnanomaterials
- investigate size and composition-dependent electronic and geometric properties of mono- and bi-metallic subnanomaterials, using the tools of spectroscopy and electron microscopy
- engineer nanomaterials for applications in energy and biomedicine

2.5 Research Regulations

For research to serve as a central pillar of SQU's activity, a comprehensive and clearly explained set of research regulations is needed. Hence, since 2001–2010, all research activities at the University have been regulated by the "Guidelines for Research Grants, Contracts and Consulting". This document, revised in May 2010, administers funded research and consultancy activities in line with the University's Mission and its long-term Vision for Research and Consultancy Services. Terms and stakeholder responsibilities are clarified to ensure that the required administrative processes of research and consultancy activities are properly defined.

Current regulations are comprehensive and cover all aspects of research activity. These include research and consultancy funding



schemes (His Majesty's Trust Fund Grants, Internal Grants, Joint Research Grants, Research Council Grants, External Grants, and Consultancy Services), criteria and requirements for research proposals and consultancy services, and approval procedures. Also covered are the responsibilities of individuals, committees and units involved in research projects, project coding, budgeting, reporting, and general rules. The DVC-PSR is responsible for the implementation of these regulations and procedures.

2.6 Research Strategy

Sultan Qaboos University has a well-defined Research Strategic Plan for the period 2009–2013. Its vision is to be a regional research leader, recognized internationally, and its mission is to develop a research culture and capacity, generate knowledge, and find solutions for strategic issues in Oman. It aims to raise the University's research profile in order to make it both a significant player at the international level and a leader in the region, while always bearing in mind national strategic needs. The plan identifies strategies for building capacity and a culture of research excellence of benefit to Omani society. It is guided by six core goals and ten strategies with important values. With the help of this plan, SQU aims specifically to be ranked as the top research university in the region by 2013.

The core goals are to (i) develop a vibrant research culture, (ii) build capacity, (iii) encourage academic excellence, (iv) address Oman's strategic needs, (v) pursue interdisciplinary research, and (vi) promote innovation.



Its vision is to be a regional research leader, recognized internationally, and its mission is to develop a research culture and capacity, generate knowledge, and find solutions for strategic issues in Oman

To achieve these goals, SQU will (i) strengthen and diversify research capabilities, (ii) expand and strengthen postgraduate programs, (iii) streamline institutional infrastructure, (iv) strengthen physical infrastructure, (v) expand research funding, (vi) raise the research profile, (vii) encourage interdisciplinary interaction, (viii) capitalize on unique natural, cultural and socioeconomic environments, (ix) encourage innovation and entrepreneurship, and (x) design and apply appropriate incentives.

Research at SQU can be broadly grouped under nine themes:

- (i) *Environmental and biological research* (includes agriculture, fisheries, water, and biodiversity)
- (ii) *Energy and non-renewable resources research* (with an emphasis on enhanced oil recovery and alternative energy sources)
- (iii) *Life and health sciences research* (includes physiology, biotechnology, human nutrition and dietetics, medicine, and nursing)
- (iv) *Humanities and social sciences research* (covers culture, the economy, business and management
- (v) *Information and communication systems research* (includes telecommunications, digital technology, computer science, e-commerce, and computer engineering)
- (vi) *Fundamental research* (includes philosophy, linguistics, mathematics, statistics, econometrics, physics, geo-physics, chemistry, and mathematical biology/ecology)
- (vii) *Materials research* (includes studies on the development, characteristics, structure and properties of natural and synthetic materials)
- (viii) *Educational research* (includes psychology, early childhood education, language planning and policies, language acquisition, testing, accreditation and quality assurance, assessment and evaluation, educational technology, and special needs)
- (ix) *Industry-related research* (includes industrial and engineering technology, food safety, security and processing, and commercial aspects)

3 Human Resources & Research Support

3.1 Human Resources

Sultan Qaboos University has always sought to attract and retain highly qualified staff. In addition, with its Omanization policy the University has worked energetically to produce Omani academics and administrators who are able to contribute effectively to the accomplishment of the University's objectives. SQU has established programs to train and qualify University staff through various means, of which their involvement in research activities is one. Promotion of efficient human resources is a key

objective in the University's Strategic Plan (2009-2013). Figure 4 shows the number of all academic, technical and administrative staff at SQU for the period 1996-2009. The number of academic and technical staff has steadily increased from 1996 to 2009 by a factor of 1.7, while the number of administrative staff has, as expected, remained fairly stable

Of all academic staff, the number of faculty members (assistant professors, associate professors and professors) involved in research was 725 at the end of 2009 (Table 2). During the same period, the numbers of technical and administrative staff supporting research activities in the colleges and research centres totalled 323 and 242, respectively. Faculty members, from diverse academic and cultural backgrounds, and from all corners of the globe, create a rich blend of teaching and research experience at SQU.

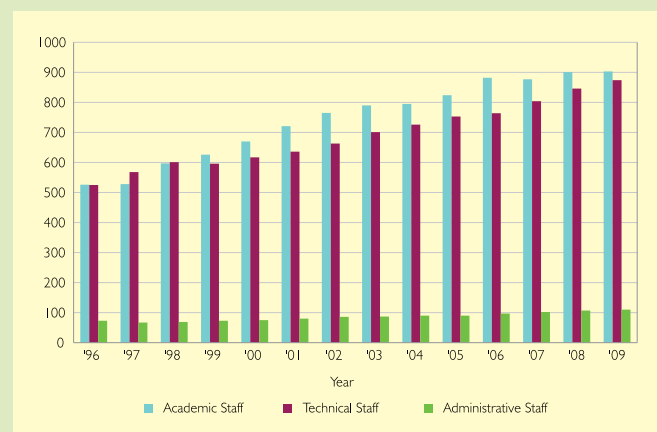


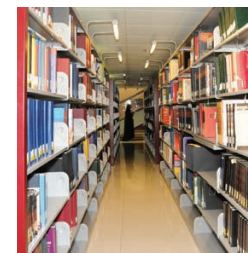
Fig 4 : Number of staff at SQU, 1996 - 2009

Table 2 : Academic Staff (Assistant Professor, Associate Professor and Professor) involved in research

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Staff	610	631	659	681	673	685	721	703	718	725

3.2 Equipment

SQU at present is well provided with state-of-



Main Library

the-art equipment for scientific research. The Colleges of Agricultural and Marine Sciences, Medicine and Health Sciences, Science, and Engineering have dedicated research laboratories, and there is adequate technical and academic expertise to operate the equipment. Available analytical equipment is equal to that found in international research institutions. There is an extensive network of computer laboratories in academic areas, whose facilities include personal computers, display units, printers, laptop computers and other accessories. The use of computers in research is significant and access to on-line research resources via the Internet is available to all. A list of major research equipment and its location in the University is given in Appendix 8.1.

3.3 Support Services

The University has several centres and support units designed to provide diverse academic support services. Among those that have a direct impact on research are the libraries and the Centre for Information Systems (CIS).

The University has one main and two specialized libraries (medical and business). In addition, there are four supporting libraries in the colleges and in the Mosque. SQU's libraries provide physical collections as well as electronic resources via the campus net-

work, the Internet, and an inter-library loan service. At present, the SQU Library system includes close to 300,000 volumes, about 1,014 printed journals, 9,706 audiovisual materials, 18,600 electronic journals, 50,000 e-books, and about twenty-seven databases. Figure 5 shows the trend in the procurement of electronic literature resources for the period 2000-2009 as a log number of journals. The special collections in the Omani Room, housed in the Omani Studies Centre, offer extensive information on Omani arts, education, law, technology, government publications, and research. The number of subscriptions to electronic resources rises annually. In 2009, the Main Library moved its premises to a new state-of-the-art building, designed to meet a wide range of student and faculty information needs. It has a seating capacity for 2,000 and space for 600,000 books. The

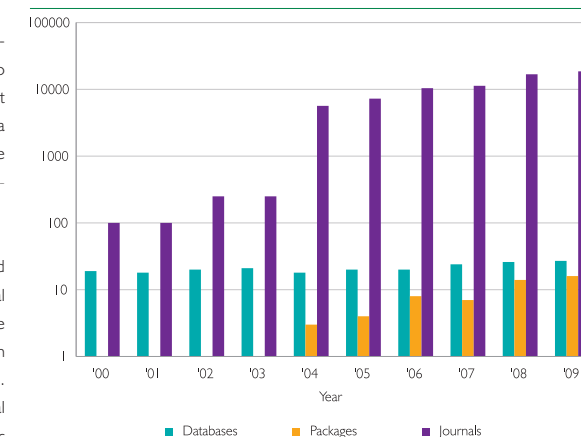


Fig 5 : Growth of electronic literature resources in SQU, 2000-2009

building provides facilities for private study, group study, and computing and technology-enriched learning.

The University's information and learning technology services are provided mainly by the Centre for Information Systems (CIS), which oversees IT equipment for all SQU's academic and administrative units. The CIS directly deploys members of its own staff to the colleges, where normally a computer users' committee addresses college-level issues concerning information and learning technology services. SQU's network (called SQUNet) has experienced significant growth since 1993, rising from 1,000 to more than 14,000 connections by 2008. The e-mail service is available for 20,000 users. SQU web resources can be accessed on and off campus.

3.4 Conferences, Symposia and Workshops

SQU has been very active in organizing and hosting conferences, symposia and workshops. Some examples of international conferences held during the last few years are as follows: (i) The International Conference on Indian Ocean Tropical Cyclones and Climate Change (2009); (ii) Mountains of the World: Ecology, Conservation and Sustainable Development (2008); (iii) Small Ruminant Production and Health in Arid Regions (2008); (iv) The First International Conference on Family Medicine (2009); (v) International Conference on Communications: Computers and Power (2007); (vi) Economic Incentives and Water Demand

Management (2006); and (vii) A Meeting of the International Council on Education for Teaching (ICET) (2009). Major conferences on nanosciences and nanotechnology, chronic childhood illnesses, food security in Arab countries, and management of soil and groundwater salinization will be hosted in 2010.

Sultan Qaboos University encourages its researchers to attend and present papers at international conferences, symposia, and workshops. Faculty members are given financial assistance once a year, if their papers are accepted for presentation. Table 3 gives the number of researchers who attended conferences during the period 2003-2009. There has been a remarkable increase in conference participation over the years, especially from 2007 onwards.

Table 4 provides a breakdown of attendance numbers classified by funding source. SQU's conference central budget represents the major source of funding.

Table 3 : Number of researchers who attended conferences, symposia and workshops, 2003-2009

Years	2003	2004	2005	2006	2007	2008	2009
Number of Researchers	59	116	173	217	298	362	388

Table 4 : Conference attendance classified by source of fund, 2007-2009

	By Invitation	Personal Expenses	College Current Budget	Conference Central Budget	Project	Total
2007	38	24	59	169	4	294
2008	26	25	81	217	13	362
2009	36	14	68	253	17	388

3.5 Journals Published by SQU

The University has established research journals in six specialties as outlets for the publication of research results. Each journal is governed by an editorial board in the relevant college. Review processes for publication are stringent and the articles published are of high quality. These journals are now receiving international attention, and research papers submitted from outside Oman are steadily increasing. Table 5 gives further details.

Table 5 : Research Journals published by SQU

Journal Title	Date of Start	No of Issues	No of Papers published
Sultan Qaboos University Journal for Science	1996	13	167
Agricultural and Marine Sciences – A Research Journal	1996	20	178
SQU Medical Journal	1999	21	312
The Journal of Engineering Research (TJER)	2004	6	61
Journal of Educational and Psychological Studies	2005	3	15
Journal of Arts and Social Sciences	2006	1	6

4 Funding and Research Areas

Funding for research is available from six sources. These are Internal Grants, Joint Grants, His Majesty's Trust Fund Grants, Research Council Grants, External Grants, and Consultancy Services.

4.1 Internal Grants (IG)

With the establishment of the Deanship of Postgraduate Studies and Research in 1999, an internal grants system was created and funds were allocated for projects. Internal grants are derived from the University's annual budget and from other internally generated income. These grants are used to support academic research which is expected to yield original results or findings that generate new knowledge or to develop concepts consistent with the research and educational objectives

of the University. Results obtained may stimulate interest in subsequent projects of a broader scope which can be considered for support from other fund sources. Internal grants are usually made available through the colleges and occasionally through the Office of the DVC-PSR. Applications for these grants are screened, reviewed, and approved first at the college and then at the university level. The amount allocated per annum is RO 500,000. Figure 6 shows the number of projects and amounts allocated from 1999 to 2009. The total value of projects ranged from RO 333,401 in 2004 to RO 466,942 in 2008; the number of projects ranged from 59 in 2003 to 97 in 2002. The average value of projects ranged from RO 4,292 in 2002 to RO 7,257 in 2000. Project numbers and values have remained fairly stable over the years, except for the period 2003-2005, which shows a



Fig. 6 – Internally funded projects at SQU, 1999-2009; the bars show funds allocated and the graph line shows the trend in the number of projects supported

relatively slight drop, perhaps attributable to (1) availability of research funds from HM Trust Fund, (2) provision of higher funding per project beginning in 2003, and (3) the number of proposals submitted by researchers during that period.

Figure 7 presents the percentage of projects internally funded in the colleges and centres for the period 1999-2009. A total of 785 projects were funded through

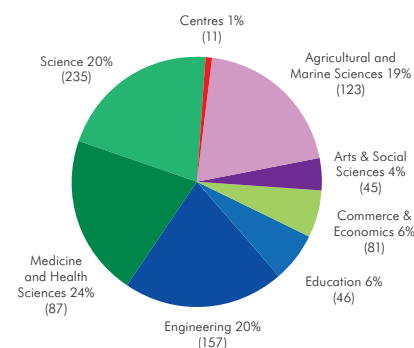


Fig. 7 – Percentage allocation of internally funded projects by colleges/centres, 1999-2009

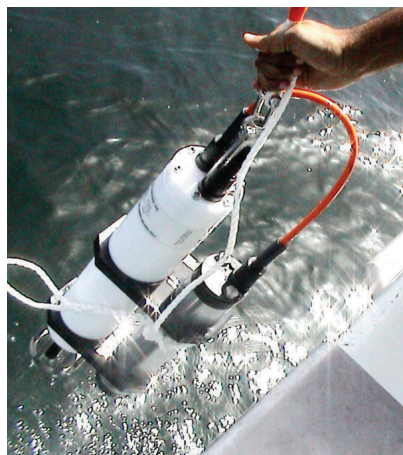
internal grants. Appendix 8.2 lists the projects by title and the funds allocated. The science colleges (Medicine and Health Sciences, Science, Engineering, and Agricultural and Marine Sciences) received the biggest share, amounting to 83% of the total. The annual budget for a science college ranges from RO 70,000 to RO 100,000, whereas for a humanities college it ranges from about RO 20,000 to RO 30,000. This can be explained by the fact that science projects involve equipment, consumables, software and other requirements. The annual research budget for the University Hospital (about RO 75,000) is combined with the support received by the College of Medicine and Health Sciences from the Internal Grants Fund. It should be noted that each college has its own criteria for maximum amounts awarded per project and therefore

the percentages shown in Fig. 7 are based on the total value of the project support awarded to each unit.

Table 6 presents the distribution of projects according to research themes. The life and health sciences research theme has the highest amount (RO 1,210,296), followed by environmental and biological research (RO 939,649). It is clear that the applied sciences with a direct impact on Oman received most of the funding.

4.2 Joint Grants (JG)

The University may allocate a budget to match funds from other institutions to jointly support a research program. This type of research grant is governed by an agreement with the other institution.



Measuring the Sea Water Quality.

Table 6 : Internally funded projects by theme

Theme	Projects	Amount (RO)
Educational research	43	253,960
Energy and non-renewable resources research	43	255,080
Environmental and biological research	149	939,649
Fundamental research	158	502,817
Humanities and social sciences research	125	445,817
Industry-related research	37	265,910
Information and communication systems research	81	324,379
Life and health sciences research	110	1,210,296
Materials research	39	233,267
Total	785	4,431,175

Since 2003, SQU researchers have also secured external grants for collaborative research with other universities and external agencies. These grants range from RO 5,000 to RO 40,000. Nine projects were jointly funded by SQU and the United Arab Emirates University in areas of common interest. In addition, one project on heavy metal contamination of fish and shellfish with the International Islamic University of Malaysia (IIUM) and another on the comparative geology of Oman and Jordan with the University of Jordan were jointly funded. Appendix 8.3 lists the projects funded through joint grants.

4.3 His Majesty's Trust Fund (HMTF) Grants

The generous funds donated by His Majesty Sultan Qaboos are used to support long-term multidisciplinary research projects of strategic importance to the Sultanate. The aim of such projects is to generate new knowledge and discoveries leading to substantial socio-economic benefits for Omani society. This type of research helps the University to build an infrastructure for centres of excellence in vital areas, in addition to making a sound contribution to the advancement of the University's academic programs.

The amount allocated per annum is RO 500,000. These are prestigious grants for which researchers from all colleges compete. The awards are based solely on the merits of the project and its relevance to Oman. The review processes include internal and external reviewers and also a presentation by the principal investigators. The successful projects are completed over a period of three years and high quality research output is expected.



Figure 8 shows the percentage of HMTF strategic research projects arising from colleges/centres for the period 2001-2009. The College of Agricultural and

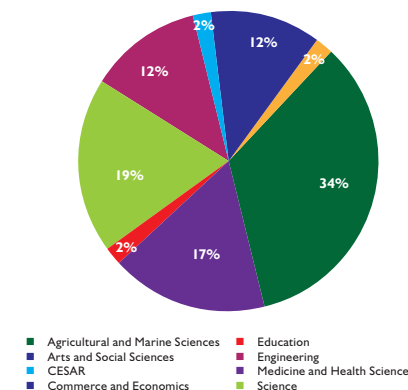


Fig. 8 – Percentage distribution of HMTF projects awarded for the period 2001 - 2009

Marine Sciences has the highest percentage (34%) in all its specialisations, followed by the College of Science (19%) and the College of Medicine and Health Sciences (17%). These three colleges are engaged in applied research of strategic value to the country. The College of Engineering submits a relatively small number of requests for these funds because it captures the major share of funding available through contracts and consultancy services. Following the above examples, other colleges are identifying projects of importance and an equitable distribution of funds among colleges is expected in the future.

Table 7 presents the percentage allocation of funds in terms of different areas of research specialization. Environmental and biological research and life and health sciences research received 44% and 31%, respectively.

Table 7 : Allocation of HMTF by different research themes

Theme	Amount (RO)	Percentage
Educational research	103,900	2
Energy and non-renewable resources research	199,200	4
Environmental and biological research	1,838,392	44
Humanities and social sciences research	51,744	1
Industry-related research	50,000	2
Information and communication systems research	184,100	4
Life and health sciences research	1,360,773	31
Materials research	478,542	12
Total	4,266,561	100

These two areas constitute 75% of the total amount spent for the period 2001-2009. As explained above, and as expected, these specializations are covered by the Colleges of Agriculture and Marine Sciences, Science, and Medicine. Appendix 8.4 lists the projects funded by HMTF.

4.4 The Research Council (TRC) Grants

Faculty are encouraged to seek funding from the Research Council. Under this scheme, projects may be funded from the Open Research Grants or the Strategic Grants. First made available in 2010, the Open Research Grants support academic research. They are



Fog Water Collection Research

considered as a key driver of wealth creation and social progress and are expected to produce new knowledge leading to future applications, markets or social understanding. Strategic Grants support strategic research activities and aim to gain or consolidate leadership in key areas. They must relate to themes identified by the Research Council as central fields of knowledge, where research capacity and excellence are particularly important for improving Oman's ability to address the social, economic, public health and environmental challenges of the future.

During 2010, SQU researchers have secured support for nine projects with a budget of RO 876,200. Four of these projects are in medicine, two in engineering, one in science, one in agriculture, and one in marine sciences. The list of these projects is given in Appendix 8.5.

4.5 External Grants (EG)

External grants are received from sponsors, such as national, regional and international agencies, industry, individuals, and other organisations, to support academic research in specific fields. The Deanship of Research gathers information on such funds and disseminates it to colleges and centres for circulation to researchers. In some cases

the researcher may apply directly to the sponsor. The list of these projects is given in Appendix 8.6.

4.6 Consultancy Services (CS)

Private and public sectors stand to benefit from the University's know-how and technical facilities through consultancy activities sponsored by them. This typically involves applied re-



XPS instrument used for Surface Science Study

search for problem-solving and in some cases systematic development of new knowledge for the benefit of the sponsor. The research could also address current problems, create new opportunities, or sometimes make unexpected discoveries. The experience gained contributes to the advancement of the University's research capabilities and academic programs, making them more appropriate for addressing Oman's major social and economic problems, while building stronger research ties with various sectors. It also creates an innovative and entrepreneurial environment at the University for creating intellectual property, with commercial potential that could promote a new knowledge-based industry, create

local employment, and bring additional revenues to the University from licensing royalties.

The University has been involved in consultancy services since 1995. Figure 9 shows the number of projects undertaken during the period 1995-2009 and the income generated. The list of these projects is given in Appendix 8.7. The funds obtained have steadily increased with time, despite fluctuations. This trend confirms that SQU is increasingly recognized as a home of expertise that provides solutions for pressing problems in Oman's private sector. Funds procured in 2001 and 2008 were significantly higher than those of other years, reflecting on

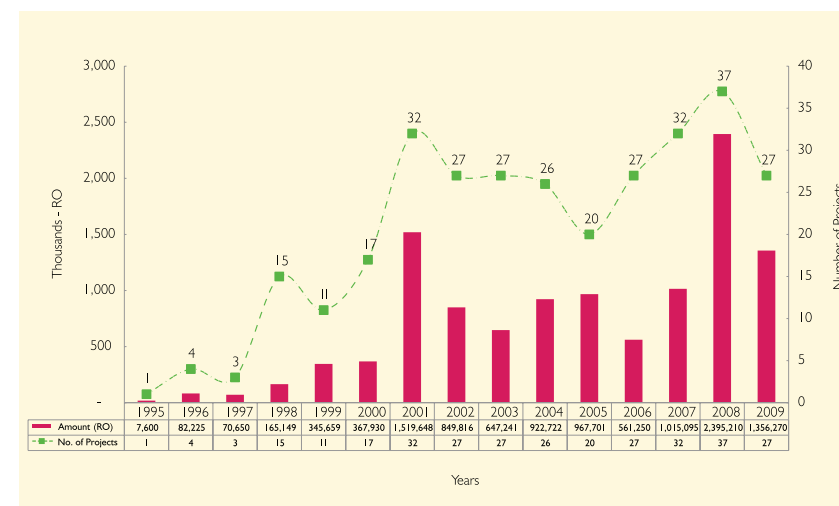


Fig. 9 – Consultancy Projects carried out for the period 1995-2009

an annual basis, the changing needs of industry, especially the oil sector

Table 8 presents the distribution of consultancy

Table 8 : Distribution of consultancy services by research theme (1995-2009)

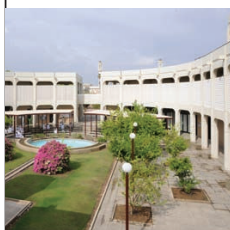
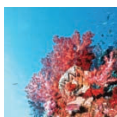
Theme	Projects	Amount (RO)
Educational research	6	70,830
Energy and non-renewable resources research	76	4,543,120
Environmental and biological research	61	2,259,514
Fundamental research	17	317,519
Humanities and social sciences research	30	285,846
Industry-related research	70	1,561,669
Information and communication systems research	17	158,670
Life and health sciences research	6	141,567
Materials research	23	1,935,430
Total	306	11,274,165

Table 9 : Consultancy services by colleges/centres (1995-2009)

Theme	Projects	Amount (RO)
Agricultural and Marine Sciences	45	1,555,018
Arts and Social Sciences	2	26,050
Commerce and Economics	6	27,227
Education	5	82,525
Engineering	176	6,665,189
Medicine and Health Sciences	4	80,267
Research centers	33	1,893,255
Science	35	944,634
Total	306	11,274,165

services by research theme and confirms that the energy and non-renewable resources sector is the major source of income, with RO 4,543,120. Research projects in this area are primarily undertaken by oil-related companies, especially Petroleum Development Oman (PDO). Materials research, industry-related research, and environmental biological research generated about R.O 5.8 million. The first two of these research areas again depend heavily on oil-related industries, while environmental and biological research is dependent on the agricultural and fisheries sectors.

Table 9 presents the number of projects and their income by college. The College of Engineering earned the highest level of income, with RO 6,665,189. Energy and non-renewable resources projects and materials research projects which, together, accounted for RO 6,478,550, were mostly carried out at the College of Engineering.



5 Research and Postgraduate Studies

5.1 Management, Mission and Objectives

Postgraduate Studies at SQU were first managed by the Deanship of Postgraduate Studies and Research from 1999-2001 and subsequently by the Office of the Assistant Vice-President for Postgraduate Studies and Research from 2001-2006. A separate deanship for postgraduate studies was established in 2006 under the auspices of the Deputy Vice-Chancellor for Postgraduate Studies and Research (Fig. 10).

The Deanship has four departments, namely Admissions and Statistics, Academic Affairs, Programs, and Scholarships and International Students. There is a director for each

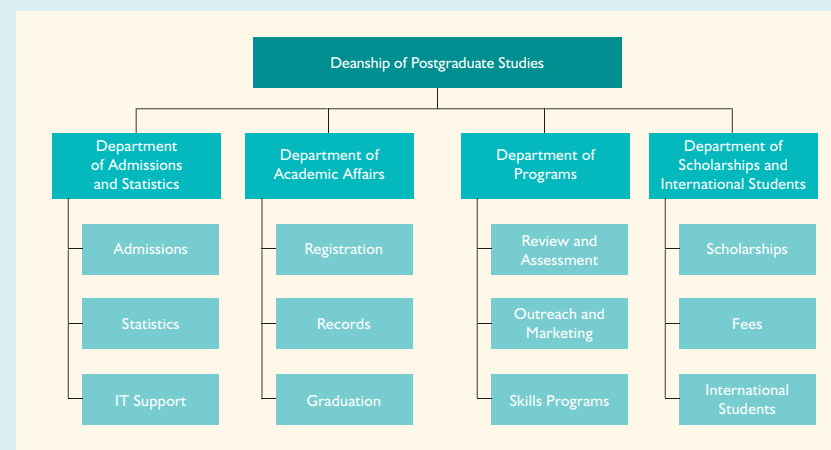


Fig. 10 – Organizational structure of the Deanship of Postgraduate Studies



department who is responsible for all assigned tasks. The Deanship has overall responsibility for the administration of postgraduate diploma, Master's and Doctoral programs.

The mission of the Deanship of Postgraduate Studies is to promote, nationally and internationally, the postgraduate programs offered at SQU and to support colleges by:

- coordinating all matters relevant to admission, registration and graduation of postgraduate students
- administering the postgraduate academic regulations
- managing the scholarship program
- marketing and publicizing programs
- offering workshops and courses to develop the skills of postgraduate students and faculty members in research and scholarship

The main objectives of the Deanship of Postgraduate Studies are to:

- implement the University's postgraduate academic guidelines and policies
- support the initiatives of colleges and the University to produce high quality graduates
- serve the needs of Omani and international students who wish to advance their knowledge, innovation and skills in the workplace

Postgraduate students (Master's and Doctoral) play a vital role in conducting research and are a key element in building research capacity at SQU and across the Sultanate. There is a strong link between postgraduate programs and research excellence. Furthermore, a PhD is the minimum requirement for students aspiring to pursue a career in university teaching and research.

5.2 Postgraduate Programs

Master's programs have been running at SQU since 1992 and are offered in all colleges, with the exception of the College of Nursing. They are available in four options: by research and thesis; by coursework and thesis; by coursework only; and by coursework and a comprehensive examination. Doctoral programs are research-based with the option of



limited coursework as required by the student's thesis committee. Twenty-four doctoral programs are offered in four science colleges: Agricultural and Marine Sciences, Engineering, Medicine and Health Sciences, and Science.

More Master's and Doctoral programs will be opening soon in the Colleges of Education and Arts and Social Sciences. Table 10 presents the postgraduate programs by specialization.

Table 10 : Masters and Doctoral programs offered by SQU

College of Arts and Social Sciences Masters Programs 1. Arabic Language and Literature 2. Postgraduate Diploma / Masters in Translation 3. History 4. Geography 5. Mass Communication 6. Library and Information Sciences	College of Education Masters Programs 1. Curriculum and Method of Teaching Arabic Language 2. Curriculum and Method of Teaching English Language 3. Curriculum and Method of Teaching Islamic Education 4. Curriculum and Method of Teaching Science 5. Curriculum and Method of Teaching Mathematics 6. Curriculum and Method of Teaching Social Studies 7. Educational Administration 8. Educational Psychology
College of Engineering PhD Programs 1. Civil Engineering 2. Electrical and Computer Engineering 3. Mechanical Engineering 4. Industrial Engineering 5. Petroleum Engineering Masters Programs 1. Civil Engineering 2. Civil Engineering (Water Resources) 3. Electrical and Computer Engineering 4. Mechanical Engineering 5. Industrial Engineering 6. Petroleum and Natural Gas Engineering 7. Geomatics Engineering	College of Agricultural and Marine Sciences PhD Programs 1. Crop Sciences 2. Food Sciences and Human Nutrition 3. Soil and Water Management 4. Marine Science and Fisheries Masters Programs 1. Natural Resources Economics 2. Agricultural Engineering 3. Animal and Veterinary Sciences 4. Crop Production 5. Crop Protection 6. Food Science and Nutrition 7. Marine Science and Fisheries 8. Soil and Water Management
College of Science PhD Programs 1. Biology 2. Earth Sciences 3. Mathematics 4. Physics 5. Statistics 6. Chemistry 7. Computer Science Masters Programs 1. Biology 2. Computer Science 3. Chemistry 4. Applied Mathematics 5. Pure Mathematics 6. Physics 7. Statistics 8. Environmental Science 9. Earth Sciences	College of Medicine and Health Sciences PhD Programs 1. Biochemistry and Molecular Biology 2. Medical Microbiology and Immunology 3. Epidemiology and Medical Statistics 4. Pharmacology and Clinical Pharmacy 5. Physiology 6. Human and Clinical Anatomy 7. Radiology and Molecular Imaging 8. Genetics Masters Programs in Biomedical Sciences 1. Biochemistry and Molecular Biology 2. Medical Microbiology and Immunology 3. Epidemiology and Medical Statistics 4. Pharmacology and Clinical Pharmacy 5. Physiology 6. Human and Clinical Anatomy 7. Radiology and Molecular Imaging
College of Law Masters Programs 1. Public Law 2. Private Law 3. Commercial Law 4. Criminal Law	College of Commerce and Economics Masters Program 1. Business Administration (MBA)



5.3 Postgraduate Students

Since the start of Master's programs in 1992, with thirty-six students, the number has steadily increased to a total of 344 students in 2009 (Fig. 11). This represents an appreciable advance in the number of students admitted. Most of the increase occurred after 1999 and the majority of students were enrolled in the humanities colleges.

Figure 12 gives the number of Master's students admitted, registered and graduated between 1992 and 2009. Fluctuations in the numbers admitted between 1992 and 2009 are difficult to explain. Possible explanations include the availability of job opportunities with high salaries, especially for science graduates, and the lack of qualified students who could meet admission

requirements. However, since 2000, there has been a steady increase in the number of students admitted to and graduating from postgraduate programs.

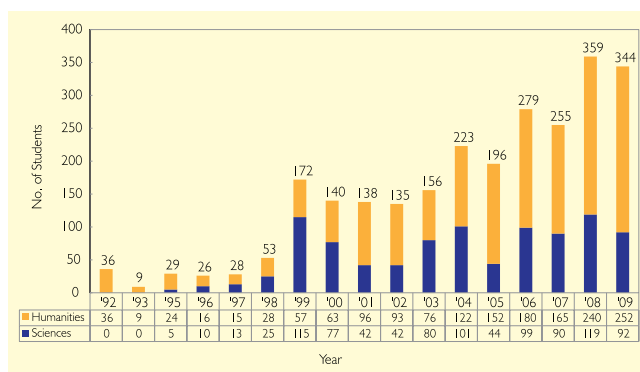


Fig 11 – The number of Master's students admitted, 1992-2009

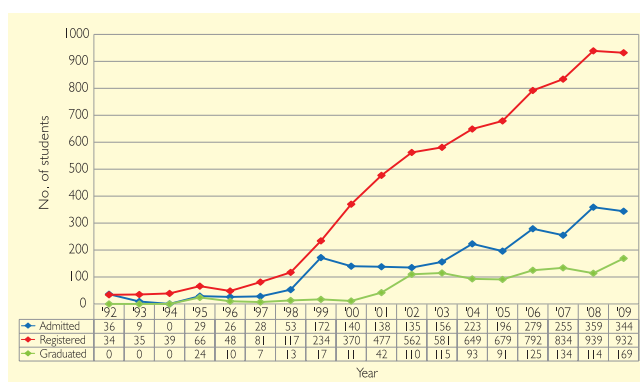


Fig 12 – Master's students admitted, registered and graduated, 1992-2009

Figure 13 indicates the number of Master's students admitted in 2009. The majority entered the College of Education (27%) and the College of Commerce and Eco-

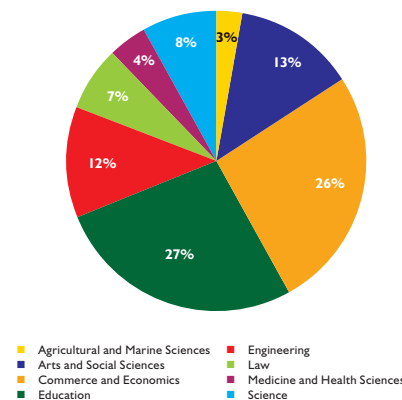


Fig. 13 – The number of Master's students admitted by colleges in 2009

nomics (26%). These two colleges took more than 50% of the students admitted in 2009. The Colleges of Engineering and Arts and Social Sciences received 12% and 13% of the students, respectively.

In 2009, the total number of registered Master's students stood at 932 (Fig. 12) and included both full-time and part-time students. The majority were part-time Omani students with a small number of international students.

Since 1992, a total of 1,075 students have graduated with Master's degrees (Fig. 12). In 1995, SQU conferred

twenty-four such degrees, in contrast to 169 conferred in 2009. This represents a 600% increase. Figure 12 also shows a comparison between the number of students admitted (2,536) and those who actually graduated (1,075) between 1995 and 2009. The difference is due to the period of time required for students to graduate (three years for full-time and five years for part-time programs).

The percentages of Master's students who graduated from all colleges at SQU between 1992 and 2009 are shown in Figure 14. The highest percentages are in the College of Education (39%) and the College of Arts & Social Sciences (21%). Of all Master's degrees conferred by SQU, 68% were from humanities colleges and 32% from science colleges.

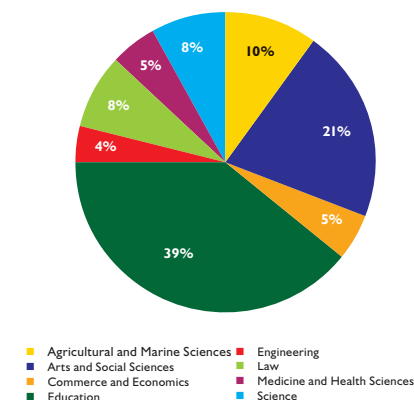


Fig. 14 – The number of Master's students who graduated, 1992-2009

5.4 Scholarship Program

SQU has been offering scholarships to postgraduate students since 2007 in recognition of its commitment to the successful implementation of postgraduate programs. Figure 15 shows that a total of 149 scholarships were awarded to Master's students between 2007 and 2009. In addition, sixteen scholarships were awarded to Doctoral students during the same period.

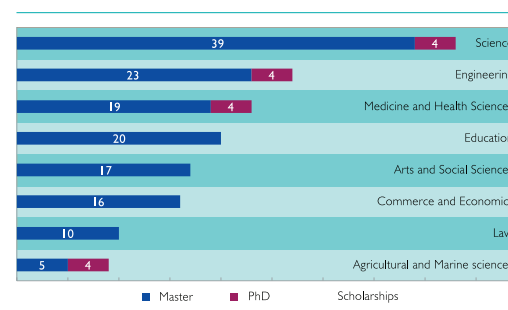


Fig. 15 – Scholarships offered to postgraduate students, 2007-2009

6 Research Output

6.1 Journal and Conference Publications

The number of refereed research publications produced at SQU for the period 1986-2009, as shown in Scopus, is

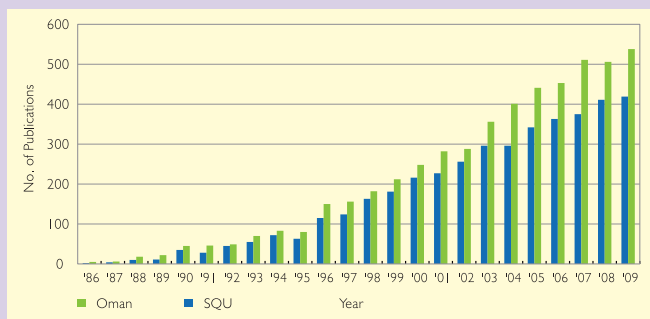


Fig. 16 – Research journal publications produced for the period 1986-2009, according to the Scopus database

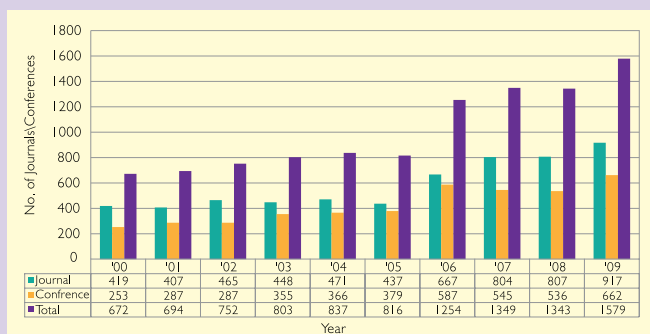


Fig. 17 – Total number of journal and conference publications produced by SQU for the period 2000-2009

presented in Fig. 16. During these years there has been a steady increase in research output, with a particular acceleration beginning in 1996. What also appears is that SQU accounts for the majority of research publications produced in Oman. For example, in 2009, 78% of these publications originated at SQU. It should also be noted that Scopus does not cover publications in Arabic, and therefore publications of the Colleges of Arts and Social Sciences, Education, and Law are not represented in this figure.

turn reflects the University's strategies for enlarging its research capacity through diverse funding, state-of-the-art facilities, expansion of postgraduate programs, and international collaboration.

The number of refereed publications by SQU faculty between 2000 and 2009 in local, regional and international journals and conference proceedings is presented in Fig. 17. A steady increase is indicated, journal publications by 120% and conference publications by 160%. This impressive trend is an indication of SQU's improvement in research productivity, which in



turn reflects the University's strategies for enlarging its research capacity through diverse funding, state-of-the-art facilities, expansion of postgraduate programs, and international collaboration.

The number of journal and conference publications produced per faculty member for all colleges except the College of Law is presented in Fig. 18. Since the College of Law in 2006 was a new addition to the establishment, it was excluded from this analysis. Here also there has been a steady growth in the ratio from 2000 to 2009. This is commendable when compared to international norms, given SQU's status as a relatively young university whose formal research funding commenced as recently as 1999 and whose Doctoral programs in science colleges began only in 2008.



Fig. 18 – Research output shown as number of publications per faculty, 2000-2009

Table 11 : Books published by SQU faculty for the period 2000-2009

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Book	26	18	22	31	32	29	39	39	40	27

6.2 Books

Sultan Qaboos University encourages the publication of peer-reviewed scholarly books. The Publications Board manages this process and authors are given a generous remuneration for their work. The number of books published by SQU faculty members for the period 2000-2009 is given in Table 11. The total number is 294 and includes books published in and outside SQU. The major contributors were the College of Arts and Social Sciences and the College of Education. The College of Arts and Social Sciences contributed 45% of the total and the College of Education 27%.

7 The Way Forward

SQU's research strategy envisages the University becoming an internationally recognized regional research leader. Its mission is to develop a research culture and capacity, generate knowledge and find solutions for strategic national issues. SQU will continue to encourage and support research in the nine main areas mentioned earlier, and the strategic objective of establishing a strong research base capable of contributing effectively to the development of Oman's economy and enriching human knowledge will remain in focus.

To improve research at SQU, attention will focus on the formation of more specialized groups in cognate areas and on support for interdisciplinary projects of strategic importance to the nation. The existing research centers will be upgraded in order to achieve higher levels of excellence. New research centers and chairs in fields of strategic importance to the country will be established.

Realizing the importance of providing a strong infrastructure and resources for research, SQU will

continue to upgrade its existing facilities. In addition, it will enhance the performance of its researchers through training courses, workshops, and incentives. In order to respond to the country's need for research and innovation, the University will also implement effective and flexible management systems. In particular, the Innovation Department will be strengthened in order to facilitate its work with researchers, government and industry.

The University will consolidate and expand research collaboration with the public and private sectors within and outside the Sultanate. New funding opportunities for research from local, regional and international sources will be explored and the University will disseminate its research output for the benefit of society.

Postgraduate programs are an integral part of building research capacity and supplying the country with specialist manpower. Hence, SQU will expand its Master's and Doctoral programs in areas of national need and importance. Opportunities for partnered programs with leading international universities will be sought and the existing scholarship program and support services will be enhanced.

SQU will strive relentlessly to achieve its ambitious goals and transform itself into a premier research institution, disseminating new knowledge widely and contributing to the development of Oman and the world beyond its borders.



Appendices





List of Abbreviations for Research Themes

1	Environmental and biological research	(EBR)
2	Energy and non-renewable resources research	(ENR)
3	Life and Health Sciences research	(LHS)
4	Humanities and Social Sciences research	(HSS)
5	Information and Communication Systems research	(ICS)
6	Fundamental research	(FUR)
7	Material research	(MAR)
8	Educational research	(EDR)
9	Industry-related research	(IRR)



APPENDIX 8.I Major Equipment



Major Equipment

Agricultural and Marine Sciences

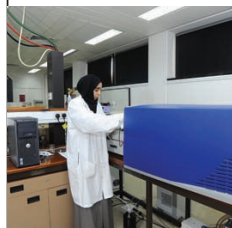
No.	Equipment
1	Animal Blood Analyzer
2	xNitrogen Analyzer
3	DNA Sequencer
4	Real Time PCR
5	DNA Extractor
6	Electroporation
7	PCR
8	ELISA Reader
9	Nutrients auto-analyzer
10	Zooplankton image analyzer
11	Modulated Differential Scanning Calorimeter
12	Food Texture Analyzer
13	HPLC
14	ICP
15	Atomic Absorption Spectrometer
16	Microwave Digester
17	25 m Research Vessel: R.V. Al-Jamiah

Engineering

No.	Equipment
1	CNC Machine
2	Solids Expandable Tubular Test Rig
3	Rapid Prototyping Machine
4	Universal Testing Machine
5	HVAC Power Transformer
6	HV Impulse Testing Generator
7	Power Control System Panel -SCADA
8	Formation Damage Unit
9	Thermal Gas Oil Gravity Drainage Rig
10	Mercury Free PVT Laboratory
11	Chemical Profile Control and IOR Laboratory
12	4000 kN Universal Testing Machine
13	Compression Tri-axial Testing Machine
14	Atomic Absorption Spectrometer

Medicine and Health Sciences

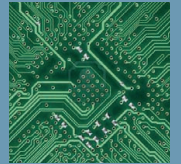
No.	Equipment
1	Electron Microscopes: a. JEOL JEM-2100F: 200kV b. JEOL JEM-1200EX: 120kV c. JEOL JEM-1230: 120kV d. ZEISS EM 900: 80kV e. JEOL JSM-5600LV: 30kV
2	Ultramicrotomes
3	Tissue Processors
4	Cryogenic Equipment
5	Sequencers
6	PCR cyclers (Standard and Gradient Thermal cyclers)
7	Real Time PCR Cycler
8	Gel Documentation System
9	Refrigerator and Freezer (-20°C)
10	Liquid Nitrogen (N2) Cryostorage Container



Science

No.	Equipment	No.	Equipment
1	Capillary Electrophoresis	17	Ultra-High Vacuum (UHV) Instrument
2	Digital Polarimeter	18	Vacuum Coating and Sputtering Systems
3	UV-VIS Spectrophotometers	19	LRC-Meter
4	Flame Photometer	20	Surface Tension Apparatus
5	FT-IR Spectrophotometers	21	Unix Labs Containing Sun Workstation
6	GC-MSD Spectrometer	22	High Performance Computing Facility (HPCF)
7	GC-FID Spectrometer	23	LC-MS/MS Tandem Quadrupole Mass Spectrometer
8	Ion Chromatograph	24	ICP/MS Quadrupole Mass Spectrometer
9	Bruker 400-MHz NMR Spectrometer	25	LC/MS Time-of-flight Mass Spectrometer
10	Geophysical Research Equipment	26	GC-MS/MS Tandem Quadrupole Mass Spectrometer
11	PIMA and Gamma Ray Spectrometer	27	Electron Microscope
12	Hydrological Research Equipment	28	Scanning X-ray Diffraction
13	Engineering Geology Equipment	29	Stable Isotope Mass Spectrometer
14	Spectroradiometer	30	Flow Cytometer
15	Mössbauer Spectroscopy	31	Atomic Force Microscope
16	Faraday and VSM Systems		





APPENDIX 8.2

Internal Grants



Agricultural and Marine Sciences

Agricultural and Marine Sciences

No.	Principal Investigator	Title	Theme	Amount (RO)
Year: 1999				
1	Neil Elloitt Forsberg	Assessment of mineral deficiencies and strategies for mineral supplementation in the Sultanate of Oman	LHS	2918
2	A. Srikanthakumar	Evaluation of two systematic breeding programs for reproductive management in lactating dairy cows	EBR	5500
3	Osman M. Gaafar	The use of local materials in feeding Omani livestock	EBR	7500
4	David B. Ampratwum	The development of solar technology for drying dates	ENR	5000
5	Lokman Zaibet	The analysis of traditional animal production systems in Oman	EBR	5000
6	Michel R. Claereboudt	The influence of nearshore hydrodynamics on the variability in larval supply and recruitment of coral reef invertebrates and fishes	EBR	7500
7	James S. Goddard	An evaluation of regional protein resources for use in aquaculture feeds	EBR	1400
8	Stefan Kasapis	The kinetics of vitrification and/or crystallisation in processed food products containing date ingredients	LHS	7000
9	Akhtar J. Khan	An investigation of phytoplasma diseases of alfalfa in Oman	EBR	7500
10	Ahmed Yahya Al-Maskri	The collection and production of seed from important crops of Oman	EBR	9500
11	Michael L. Deadman	Sustainability and the control of diseases in greenhouse crops in Oman	EBR	1400
12	Hayder A. Abdel Rahman	The consumptive use of greenhouse crops utilizing low quality water	EBR	1400
13	Anvar Kasimov	The analytical and numerical determination of hydraulic characteristics	EBR	1300
14	Mushtaq Ahmed	Investigation of the groundwater quality in selected agricultural areas of Oman	EBR	2500
15	Peter Cookson	Monitoring, modeling and combating soil salinity at the SQU Agricultural Experiment Station	EBR	6500
16	Salim Ali Al-Rawahy	Electrokinetics to manage nitrate movement in irrigated soils	EBR	9500
Year: 2000				
17	Eugene H. Johnson	Characterization of vitamin B12 deficiency in Omani goats: an epidemiological, clinical, serum, biochemical and immunological analysis	EBR	5000
18	A. Srikanthakumar	The effect of bovine somatotropin (BST) on milk production, health and reproduction in lactating dairy cows in Oman	EBR	2315
19	Shyam Sablani	The enhancement of quality and storage stability of dried abalone using freeze-drying	LHS	12000
20	Hussain Boughanmi	The role of agriculture in Oman's economic development: a general equilibrium framework	HSS	3500
21	James S. Goddard	Development of a novel test for the rapid determination of protein quality for aquafeed ingredients	EBR	9800
22	Michel Claereboudt	Development of a web-based instructional media in marine sciences	ICS	5000
23	Hamed Said Al Oufi	A gillnet selectivity study for the Seeb sardine fishery	EBR	4650
24	Stefan Kasapis	Fish product development for export and the local market: a strategic programme for freshness, quality control, microbiology & the processing of fish	LHS	12000

Agricultural and Marine Sciences

No.	Principal Investigator	Title	Theme	Amount (RO)
25	Shafiu Rahman	Structural changes in biological materials during drying: a framework for developing quality fish products from raw agricultural materials from the Sultanate of Oman	LHS	11000
26	Iqar Ahmed Khan	Screening exotic potato germplasm for adaptation to the heat-stressed environments of Oman	EBR	5100
27	Humphrey A. Esehie	Chlorophyll metering: an innovative approach to nitrogen management in forage corn	EBR	8535
28	Khaja M. Azam	Insecticidal properties of subtropical plant extracts	EBR	5375
29	Mahdi El Mardi	Procedures for managing Witches'-broom disease in lime (WBDL)	EBR	3925
30	Peter Cookson	Measurement of rates of potential methanogenesis in sediment gathering behind recharge reservoirs	EBR	400
Year: 2001				
31	Eugene H. Johnson	Production, reproduction and clinical manifestations induced by low dietary levels of vitamin B12 in Omani goats	EBR	9600
32	Isam T. Kadim	Improvement of carcasses and meat quality characteristics of Omani sheep and goats	LHS	5400
33	Johan Perret	Investigation and optimization of humidification and dehumidification processes in greenhouses to produce fresh water from saline water	EBR	8493
34	Lokman Zaibet	The development of e-commerce in the agro-food industry: significance for the Sultanate of Oman	ICS	8400
35	Ann S. Mothershaw	Prevalence of salmonella in/on eggs in the Sultanate of Oman	EBR	6400
36	Frisco Consolacion	The roles of light and copper in the development of off-flavour in milk	LHS	2400
37	Nejib Guizani	The quality assessment of fresh yellowfin tuna during low temperature storage	EBR	9400
38	Saud Iqbal	Nutritional status of the Omani population: assessment of biochemical indicators of the vitamin nutriture of male and female university students in Oman	LHS	10200
39	Akhtar J. Khan	Development of transgenic potato cultivars expressing d-endotoxin gene resistance against potato tuber moth (<i>Phthorimaea operculella</i>)	EBR	10400
40	Iqar A. Khan	Introduction and evaluation of lime somatic hybrids potentially resistant to witches'-broom disease in lime	EBR	9500
41	Michael L. Deadman	The use of CAT scanning to investigate soil, water and pathogen interactions	EBR	4400
42	Salim Ali Al Rawahy	The development of a solar thermal-powered water pumping system	ENR	8400
Year: 2002				
43	A. Srikanthakumar	Identification of antimicrobial substances in fresh commercially sold pasteurized milk in Oman	EBR	3300
44	Osman M. Gaafar	The determination of commercial meat products' quality in the Sultanate of Oman	LHS	8650
45	Linus Opara	The development and testing of a computer-controlled, cyclic-cisted forced ventilation system for cooling dairy cows	HSS	3000
46	Shyam Sablani	Assessment of a high hydrostatic pressure blanching technique in food processing	LHS	3900



Agricultural and Marine Sciences

No.	Principal Investigator	Title	Theme	Amount (RO)
47	M. Shafiur Rahman	Textural properties and consumer preference: identifying optimum quality characteristics of dried dates by rheological profile analysis related to texture	EBR	4900
48	Mattheus F. Goosen	Assessment of concentration polarization in a brackish and sea water reverse osmosis system	EBR	4080
49	Houcine Boughanmi	A quantitative assessment of WTO negotiations on agriculture and food security in Oman	HSS	3450
50	Michel Claereboudt	Heavy metals in coral skeletons	EBR	2550
51	Arnold Sutterlin	Environmental tolerance limits and physiological adaptations of the Arabian pup fish, <i>Aphanius dispar dispar</i> (Ruppell), to extremes in temperature, salinity and dissolved oxygen	EBR	3750
52	Stefan Kasapis	Scientific and technological aspects of the development of confectionery and ice cream products using mixtures of gelatin and k-carrageenan	LHS	10800
53	Ahmed Yahya Al-Maskri	The collection and evaluation of native and exotic germplasm in important crops of Oman	EBR	9600
54	Mushtaque Ahmed	The assessment of greywater reuse potential in Oman	EBR	9180
55	Jennifer McIlwain	An examination of life-history parameters of the common grouper, <i>Cephalopholis hemistiktos</i> , and its application to fisheries management	EBR	10650
56	Salem Ali Al-Jabri	Solute transport in porous media: physical, analytical, and numerical modeling	EBR	6150
57	Anvar Kacimov	Analytical modeling of multiphase flows in porous media	EBR	3000
Year: 2003				
58	Isam Tawfik Kadim	A study of the relationship between ascorbic acid supplementation and heat stress on poultry maintained in open-sided housing	EBR	9700
59	Johan Perret	Three-dimensional fractal analysis of preferential flow paths using CT scanning	EBR	4200
60	Hamed Said Al-Oufi	The use of selection grids to reduce discarding in the demersal trawl fisheries of Oman	EBR	9900
61	Ishtiaq Mahmud	The effects of kingfish oil on atherogenic factors in rats	EBR	4200
62	Najib Guizani	The ripening profile of semi-hard standard goat's milk cheese	LHS	6000
63	Iqar Khan	Introduction and evaluation of the exotic germplasm of important solanaceous vegetable crops (tomatoes and peppers)	EBR	8600
64	Humphrey Esechie	The response of chickpea (<i>Cicer arietinum</i> L.) to salinity stress	EBR	4400
65	Nadia A. Al-Saadi	The integrated management of fruitflies in the Sultanate of Oman	EBR	4200
66	Akhtar J. Khan	Molecular and serological characterization of alfalfa phytoplasma	EBR	8000
67	Hayder Abdel Rahman	The evaluation of four water-saving hydrophilic copolymers	MAR	380
68	Malik M. Alwardy	The fraction of heavy metals in calcareous soil amended with sewage sludge	EBR	4450
69	Peter Cookson	Desalinating soil by linking a novel solar heated process to an augmented water supply	EBR	10800
Year: 2004				
70	Linus Opara	Quantification, prediction, and reduction of postharvest losses of fresh food crops in Oman	EBR	7500



Agricultural and Marine Sciences

No.	Principal Investigator	Title	Theme	Amount (RO)
71	Sanmugam Prathapar	The methodology to identify redundant piezometers and locations for new piezometers in hydro-geologic basins	EBR	5600
72	Linus Opara	The utilization of power and machinery in arid agriculture	IRR	2650
73	Saiyed Ahmed	Studies of foodweb interactions and carbon flow in the mangrove ecosystem of the Sultanate of Oman	EBR	9450
74	Saud Musalm Al-Jufaili	Biometrics of the Indian oil sardine <i>Sardinella longiceps</i> Val. along the coast of Oman	EBR	3600
75	Adnan Rashid Al-Azri	The seasonal study of dissolved organic matter in relation to phytoplankton in the Gulf of Oman	EBR	7550
76	James S. Goddard	Integrated small-scale tilapia farming in Oman	EBR	4250
77	Amanat Ali	The nutritional evaluation of traditional Omani meals: studies on their chemical composition, glycemic responses and atherogenic factors	LHS	7700
78	Michael Deadman	Salinity as a direct and indirect predisposing factor for damping off disease in greenhouse cucumber production	EBR	9520
79	Nadiya A. Al-Saadi	The development and optimization of genetic transformation procedures for Omani banana varieties	EBR	8280
Year: 2005				
80	Osman M. Gaafar	The use of various levels of fish silage for feeding Omani sheep and goats	EBR	6000
81	Mohamed H. Tageldin	Caprine Arthritis-Encephalitis Virus (CAEV): a pathological and serological study	EBR	10325
82	Waleed S. Al-Marzooqi	The evaluation of alternative cheap local energy and protein sources for feeding Omani and commercial poultry strains in the Sultanate of Oman	EBR	10000
83	M. Shafiur Rahman	Effects of drying methods on the functionality of garlic powder	EBR	7200
84	Houcine Boughanmi	Analyzing the implications of the new GCC Customs Union on trade, industry competitiveness and the economic welfare of GCC countries	HSS	4800
85	Slim Zekri	Water markets in aflaj systems: economic efficiency and institutions	HSS	5000
86	Hemisiri Kotagama	Economic and institutional aspects of kingfish management	HSS	5000
87	Michel Claereboudt	The biodiversity and community structure of hard-substrate littoral communities in the Sultanate of Oman	EBR	10500
88	Buthaina E. Al-Rasasi	Nausea and vomiting in pregnancy: maternal nutrition and pregnancy outcomes	LHS	3600
89	Akhtar J. Khan	The development of salt, drought and gemini virus tolerant tomato crops in Oman	EBR	11900
Year: 2006				
90	Eugene Johnson	The effect of low levels of dietary cobalt on select parameters of the specific and non-specific immune responses of Omani goats	EBR	10200
91	Isam Kadim	The bioavailability of iron in various types of meats in the Sultanate of Oman	LHS	10000
92	Sayyed Iqbal	Comparative studies of size-fractionated phytoplankton primary productivity and bacterial biomass production in Bandar Khayran Bay, Gulf of Oman, and Masirah Island, Arabian Sea	EBR	11500

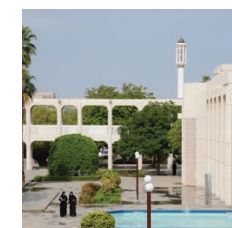
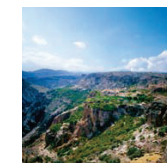


Agricultural and Marine Sciences

No.	Principal Investigator	Title	Theme	Amount (RO)
93	Nadiya A. Al-Saadi	Molecular investigation of lime witches' -broom phytoplasma in Oman	EBR	10200
94	Ahmed Yahya Al-Maskri	The collection and evaluation of native and exotic germplasm of important crops of Oman	EBR	8000
95	Michael Deadman	Mango rootstock evaluation, conservation and use in the Sultanate of Oman	EBR	7100
96	Fahad A. Al-Said	The screening of lettuce cultivars for production under different shade levels	EBR	4720
97	Rashid A. Al-Yahyai	The physiological responses of date palm to various levels of water stress	EBR	4480
98	Said Salim Al-Ismaily	The effect of manure amendments with varying C:N ratios on N mineralization in soils	EBR	4400
99	Yaseen Ahmed Al-Mulla	The design and construction of greenhouses for arid regions	EBR	4400
Year: 2007				
100	Patrick A. Bobade	Investigation of the prevalence of tick infestation and tick-borne haemoparasites of goats in the Sultanate of Oman: Part I	EBR	12000
101	Akhtar J. Khan	Molecular characterization of phytoplasma associated with witches' -broom, phyllody / virescence diseases of sesame (<i>Sesamum indicum</i> L.) in Oman	EBR	12000
102	Msafiri Mbagi	The effect of the Omanization policy on the efficiency of dairy and date farms in Oman	HSS	11350
103	Adnan R. Al-Azri	The role of Harmful Algal Blooms (HABs) in the coastal waters of Oman with an emphasis on the role of <i>Noctiluca scintillans</i> and <i>Trichodesmium</i> sp.	EBR	12000
104	Veera B. Yellepeddi	Biophysical dynamics of the upwelling ecosystems and surface currents along Oman's coast	EBR	12000
105	Saud M. Al-Jufaili	The reduction of post-harvest losses and improvement of fish handling systems in Oman	EBR	4995
106	Amanat Ali	The role of dietary and lifestyle risk factors in the prevalence of non-Hodgkin's lymphoma in Oman	LHS	4950
107	Mushtaque Ahmed	The application of water saving technologies in domestic water conservation in Oman	EBR	4900
Year: 2008				
108	Osman M. Gaafar	Evaluation of Omani camel performance under intensive management for meat production and quality	HSS	12000
109	Waleed S. Al-Marzooqi	The effect of thermal processing and enzyme supplementation on the nutritive value of local agricultural by-products as feed ingredients in chicken diets	EBR	11500
110	Yasmin El Tahir	Investigation of <i>Brucella melitensis</i> immunogenic domains	EBR	12000
111	Slim Zekri	Damage costs in dry aflaj and live aflaj: value for recreation	HSS	8900
112	Aaron Henderson	The taxonomy and ecology of benthic elasmobranchs in the Gulf of Oman	EBR	4980
113	Ahmed Ali Al-Alawi	The chemical and physical characterization of date pectin and its effect on date syrup quality	EBR	6000
114	Majeed Al-Ani	The antiatherogenic characteristics of the consumption of fruits and vegetables grown in Oman	EBR	11000

Agricultural and Marine Sciences

No.	Principal Investigator	Title	Theme	Amount (RO)
115	Nejib Guizani	Production and quality assessment of a smoked tuna (<i>Thunnus albacares</i>) product	EBR	3800
116	Mohammed A. Basunia	Performance evaluation of a solar tunnel dryer for the drying of fishes and dates in Oman	ENR	4350
Year: 2009				
117	Abdullah M. Al-Sa'di	Characterization of the gummosis and foot/root rot diseases of citrus in Oman	EBR	11600
118	Michael Deadman	Causal agents of the sudden decline of melon in Oman	EBR	10000
119	Akhtar J. Khan	Molecular characterization of the begomovirus associated with tomato and other crops and the screening of tomato cultivars tolerant of the tomato yellow leaf curl virus	EBR	10000
120	Adnan R. Al-Azri	The role of zooplankton in controlling the bloom-formation in Oman water bodies	EBR	10500
121	Sergey Piontkovski	A database on the Arabian Sea ecosystem	ICS	11000
122	Sergey Dobretsov	Non-toxic antifouling compounds from marine bacteria	EBR	12000
123	Yaseen Ahmed Al-Mulla	The design and construction of greenhouses for arid regions: Phase 2	MAR	4900





Arts and Social Sciences

Arts and Social Sciences

No.	Principal Investigator	Title	Theme	Amount (RO)
Year: 1999				
1	Salah A. Al Eofei	The Sultanate of Oman University Atlas	HSS	5400
2	Said M. Al-Hashimi	History of the Omani Cabinet	HSS	2000
3	Abdelmajid S. Bouazza	Study programs provided at the College of Arts, SQU, and the requirements of the Omani job market	HSS	4200
Year: 2000				
4	Moawiyah I. Yousef	Excavations and survey of Ain Hamran and Wadi Adounib in the Governorate of Dhofar	HSS	14360
5	Hassan Mustapha	Studies in contrastive rhetoric: the contribution of translation	HSS	1700
6	Ahmed A. Al-Mashaiki	The role of mass media in forming Omani youth attitudes to work in the private sector	HSS	3200
7	Ahmed Al Beli	Omani youth attitudes to professions and handicrafts	HSS	3150
Year: 2001				
8	Ali Tigani El-Mahi	The occasional diet and its constituents in traditional societies in Oman	HSS	1800
9	Naeena H. Jabr	An evaluative study of the use of information technology within the Basic Education plan	HSS	3300
Year: 2002				
10	Ali Tigani El-Mahi	Traditional goat management in Oman	HSS	3000
11	Moawiyah I. Yousef	Archeological field investigations at Manal	HSS	1300
12	Jamal En Nehas	Travel and cross-cultural encounters: points of contact or conflict?	HSS	1300
13	Said M. Al-Hashimi	Dictionary of Omani Biography in the 19th Century A.D.	HSS	4990
14	Saleh Abu Osba	An alternative theory of mass communication effects	HSS	1450
15	Mohamed A. Al-Meshaikhi	Effective factors in mass media performance	HSS	2000
16	Anwar Al-Rawas	Human relations and the effectiveness of management in Omani radio and television	HSS	1800
17	Abdulla K. Al-Kindi	Communicators' agenda setting in the Omani daily press: a case study	HSS	1700
18	Obaid S. Al-Shaqsi	Information sources amongst undergraduate students in Oman	HSS	2000
19	Mohamed Abdel Nabi	Cultural globalization and the Omani personality	HSS	700
20	Aida Abdel Fatah	Women's education and labour market in the Sultanate of Oman	HSS	2350
Year: 2003				
21	Abdel Halim M. Hamid	The phonetics and phonology of Omani Arabic	HSS	4565
22	Said M. Al-Hashimi	Traditional Omani costume designs in the Al Batinah region	HSS	5130



Arts and Social Sciences

No.	Principal Investigator	Title	Theme	Amount (RO)
23	Mohamed Rebhi	A retrospective national Omani bibliography 1993-2000	HSS	2000
24	Abdelmajid Bouazza	Scientific productivity among faculty at Sultan Qaboos University	HSS	4200
25	Maged Negm	The future of convention and meeting tourism in the Sultanate of Oman	HSS	3200
Year: 2004				
26	Moawiyah I. Yousef	Archaeological investigations at Wadi Bani Kharous	HSS	2760
27	Said M. Al-Hashimi	Oman and Omanis in Al-Sahifa Al-Qahtaniyyah	HSS	3800
28	Khalid K. Al-Wohaibi	Al-Utubi's contribution to Omani's history: a critical edition of his historical work (Muadhihal - Ansab)	HSS	6000
29	Naeena H. Jabr	E-classes as a means of solving higher education problems: an analytical study of the SQU case	ICS	4200
30	Fathy A. Al-Hadad	Utilizing the Omani architectural heritage as a tourism resource	HSS	4500
Year: 2005				
31	Ali Tigani El-Mahi	The esculent wild plants of Dhofar: a perpetuation of gathering and subsistence strategies	HSS	2600
32	Amal A. Habib	Language attitude among Lawatia speakers and its implications for language choice	HSS	2700
33	Nafla S. Al Kharusi	Language maintenance and shift among Swahili speakers of Oman	HSS	2650
34	Shaikha S. Almosalmy	Family violence	HSS	4000
35	Mohamed El-Sayed	A study of Oman's visitors' profile	HSS	4700
Year: 2006				
36	Ali Tigani El-Mahi	Tethering stones in Al Mudaybi, Oman	HSS	2100
37	Mohammed A. Al-Belushi	Archaeological investigations in Shenah, Oman	HSS	5950
38	Fathy A. Al-Hadad	Tourism development for Omani islands and creeks	HSS	4700
Year: 2008				
39	Ali Tigani El-Mahi	Traditional pastoral precautionary measures against blood-feeding midges in Dhofar	HSS	6500
40	Mohammed A. Al-Belushi	The significance of minor food resources in arid environments: traditional subsistence strategies in Oman	HSS	14000
41	Domenyk C. Eades	A linguistic survey of the Sharqiya region of Oman	HSS	6645
42	Abdelmajid Bouazza	The attitude of SQU faculty towards open access journals on the Internet and its impact on the management of SQU libraries	ICS	3200
43	Fathy A. Al-Hadad	Conservation of the Omani archeological heritage and utilizing it as a tourism resource	HSS	4250
Year: 2009				
44	Ali Tigani El-Mahi	Traditional camel management in Dhofar, Oman	HSS	9800
45	Montasser I. Mahmoud	Economic activities in Al-Seeb wilayat: a geographical study	HSS	4350



Centres

Centres

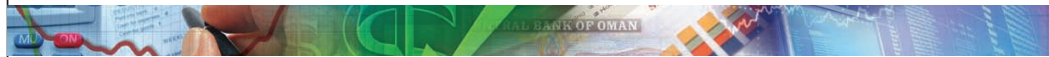
No.	Principal Investigator	Title	Theme	Amount (RO)
Year: 1999				
1	Amer Awadh Al-Rawas	An Omani Arabic Databank	ICS	18000
2	Prakash M. Deshpande	Establishing Oman's national English language standards	ICS	4000
3	G. Rajagopal	Needs analysis of the communication skills in English Language required by employers in Oman	ICS	1250
Year: 2000				
4	Amer Ali Al-Rawas	The Omani Sarooj Project	MAR	27900
5	Aisha H. Al-Khayat	A microscopic study of cell death in the morphogenesis of mouse and chick embryonic adrenal glands	EBR	1500
Year: 2001				
6	Zuhoor A. Al-Khanjari	Using a propagation, infection and execution (PIE) testability technique for assessing the reliability of the software available in an Omani government organization	ICS	900
Year: 2002				
7	Ibrahim A. Al-Bakri	Artistic creation	EDR	8000
Year: 2006				
8	Basim M. Al-Dahadha	The effectiveness of a systematic desensitization strategy upon test anxiety reduction, and enhancement of adjustment levels	EDR	1000
9	Suad M. Sulaiman	The relationship between quality of life and census variables among Sultan Qaboos University employees	FUR	900
Year: 2007				
10	Ali Hilal Al-Abri	Collection of all information about Shaikh Ibrahim bin Said Al-Abri	HSS	4600
Year: 2009				
11	Rahma I. Al-Mahrouqi	Analyzing the use of motivational strategies in EFL classrooms in Oman	ICS	3260



Commerce and Economics

Commerce and Economics

No.	Principal Investigator	Title	Theme	Amount (RO)
Year: 1999				
1	Fahim A. Al-Marhubi	The determinants of long-run economic growth in the Middle East and North African region	HSS	2226
2	James P. Gunning	From rentier economy to economic integration: the present and future of the economy of Oman	HSS	4900
3	Salma M. Al-Lamki	A survey of higher education in light of the privatization program: the case of the Sultanate of Oman	EDR	2000
4	Sunil P. Dharmapala	A survey of the implementation of operations management and business statistics methods in the service and manufacturing organizations of the Sultanate of Oman	HSS	800
5	Jay Ghosh	New heuristics for the dynamic layout problem	HSS	1600
6	Thomas Jefferson	Global solution of Omani business problems	HSS	2100
Year: 2000				
7	Sivakumar Velayutham	Historical and social factors affecting the practice of accountability	HSS	1200
8	Tsze Sun Li	Establishing a dynamic website to manage the teaching of business communication	ICS	4000
9	Azmat Gani	Fertility rates in Oman and a cross-section of Middle East and North African countries: economic analysis and policy implications	HSS	1600
10	Mazhar Islam	Banking in GCC countries: performance, challenges and opportunities	HSS	6000
11	Orhan Erdem	Perceptions of Turkish consumers about the ethicality of marketing practices	HSS	4600
12	Sunil P. Dharmapala	A survey of the implementation of operations management and business statistics methods in the service and manufacturing organizations of the Sultanate of Oman	HSS	3400
13	Sunil P. Dharmapala	Reducing the processing time of government business operations: a case study in developing a template for future development	HSS	3900
Year: 2001				
14	Naim H. El Sayed	Financial control of state-owned enterprises in GCC countries	HSS	3950
15	Moshtaque Hussain	An examination of the efficiency of Islamic banks in GCC countries	HSS	3400
16	Ehab Mohamed	The role of accounting information systems in performance measurement in firms in Oman	ICS	3400
17	Azmat Gani	An empirical investigation of foreign aid types and well-being	HSS	1500
18	Mohammad Ziaul Hoque	Loan loss: the case of commercial banks in Oman	HSS	1650
19	Mazhar Islam	An empirical investigation of trends and performance in Arab GCC stock markets	HSS	18450
20	Ruhul A. Salim	Intertemporal relationships between R & D expenditures and trade performance with reference to developing countries	HSS	3880



Commerce and Economics

No.	Principal Investigator	Title	Theme	Amount (RO)
21	U. Moideenkutty	Extra-role behaviors in organizations	HSS	900
22	Salem Lakhal Y.	Potential criteria and procedures for evaluating projects with significant environmental impacts	HSS	2500
23	Avninder Gill	The applicability of supply chain concepts to the GCC's non-manufacturing companies	HSS	2500
Year: 2002				
24	Mostaque Hussain	Towards a performance measurement model for Islamic financial institutions	HSS	1200
25	Ehab Mohamed	The market for audit services in GCC countries	HSS	1200
26	Fahim A. Al-Marhubi	The causes and consequences of governance	HSS	1150
27	Azmat Gani	Technological achievement, FDI and high-tech exports	HSS	1200
28	Mohammed Ziaul Hoque	The theory of guided industrial credit and its application: the case of Oman and Bangladesh	HSS	1250
29	Moshtaque Hussein	The efficiency and productivity growth of commercial banks in the GCC countries	HSS	2600
30	Mazhar Islam	Privatization, deregulation and financial sector reforms in the economic growth of Oman: an empirical study	HSS	1400
31	Yurii Boreisha	An analysis of trends in E-commerce and E-business	ICS	3500
32	Asya M. Al-Lamky	The human variable and productive employment in Omani organizations	HSS	1700
33	U. Moideenkutty	Influence tactics: a study of managers in Oman	HSS	1800
34	Orhan Erdem	Internet use by SQU faculty	ICS	2000
35	Mahmood Hajjat	The meaning and measurement of customer orientation in Omani businesses	HSS	1000
36	Ishaq Bhatti	Optimal testing for change-point problem in the presence of nuisance parameters	HSS	1200
37	Sunil P. Dharmapala	On the implementation of semi-parametric techniques for logistic and Poisson regression models	HSS	1500
38	Avninder Gill	Supply chain design and planning models	HSS	2300
39	Thomas Jefferson	Global solutions to Omani business problems (continuation)	HSS	1100
40	R. Ramanathan	Econometric studies on the production and consumption of petroleum products in Oman with special reference to gasoline	HSS	2500
41	Hussein Saber	Technology transfer strategies for developing countries	HSS	1550
Year: 2003				
42	Geetha Subramanian	Trends in the development of the transport sector in Oman and their implications for Oman's economy	HSS	600
43	Sunil P. Dharmapala	Computation of stability regions for retaining efficiency in Data Envelopment Analysis-Assurance Region (DEA-AR) models with an application to the banking industry in Oman	ICS	400
44	Ishaq Bhatti	The optimal testing and modelling of complex econometric surveys	HSS	3150
45	Sherif Lashine	Contemporary business education in Oman and global challenges	HSS	1000



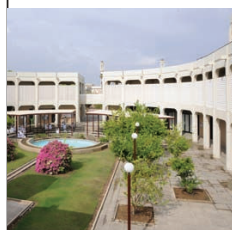
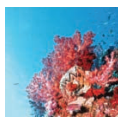
Commerce and Economics

No.	Principal Investigator	Title	Theme	Amount (RO)
Year: 2004				
46	Ehab Mohammed	An empirical investigation of the efficient market hypothesis in emerging markets: the case of the Muscat Securities Market	HSS	1900
47	Fahim A. Al-Marhubi	Economic freedom and instability in economic performance	HSS	600
48	Masudul A. Choudhury	The political economy of civilization and structural change	HSS	1500
49	Mohammed Z. Houqe	The flawed developmental role of the small loan providers and growth stagnation of micro enterprises: evidence from Oman	HSS	450
50	Manzur Ali Ajiz	A survey of information technology applications in the GCC countries	HSS	3475
51	Nada Khatib	The social, economic, legislative, and development impacts and tactics of Oman's female entrepreneurs in Information Technology (IT)	HSS	3050
52	Raied Salman	Automated booking systems	ICS	1500
53	Asya M. Al-Lamky	Job satisfaction in selected Omani organizations	HSS	1250
54	U. Moideenkutty	The impact of human resource management practices on organizational performance: a study of Omani organizations	HSS	2700
55	Rafi Ashrafi	An evaluation of ISO 9000 registration practices in Oman	HSS	2900
56	Avninder Gill	Applications of fuzzy logic in quality control	HSS	1450
Year: 2005				
57	James Rajasekar	Differences in the ethical perceptions of male and female business students in Oman and India	HSS	4000
58	Rizal Ahmad	Store choice behaviour of shoppers in terms of benefits sought	HSS	4850
59	Mohammed Z. Hossain	The power and size comparison of some non-nested regression through modified regressor design	FUR	1350
Year: 2006				
60	Rafi Ashrafi	Information technology as a strategic asset: an empirical investigation of the relationship between tangible and intangible assets in information technology as a source of competitive advantage with special reference to Oman and the GCC	ICS	27870
61	Naser Manochchri	The MBA program at SQU: exploring the challenge of ensuring quality while retaining applicants	HSS	1950
62	Darwish S. Al-Moharby	Small business entrepreneurs in Bidbid: the prospects and challenges	HSS	3750
63	Rizal Ahmed	Regret! Why did I do it? An investigation into the decision-making process of car buyers who regretted their decisions	HSS	2500
Year: 2007				
64	Salih Osman	The effect of knowledge and technology transfer on long-term growth: a country cross-section comparison between Oman, the Gulf Cooperation Council countries and selected Asian countries, 1985 - 2005	HSS	1875
65	Asya M. Al-Lamky	Gender issues in Omani organizations	HSS	1650
66	Darwish S. Al-Moharby	Developing business case studies in the Arabian Gulf	HSS	21880
67	Rizal Ahmad	Measuring the perceived value of consumer products (cars and mobile phones) at a brand level	HSS	1460



Commerce and Economics

No.	Principal Investigator	Title	Theme	Amount (RO)
Year: 2008				
68	Masudul A. Choudhury	Overlapping generation models for Islamic Asset Valuation	HSS	3800
69	Ali Hamad Al-Badi	Evaluating and enhancing the usability/accessibility of SQU's portal	ICS	4950
70	Kamla A. Al-Busaidi	Developing a comprehensive framework for evaluating E-learning acceptance in higher education in Oman	ICS	3300
71	Khamis N. Al-Gharbi	Exploring IS/IT outsourcing practices in the Sultanate of Oman	HSS	3400
72	Rafi Ashrafi	In search of excellence in quality	HSS	4450
73	Syed J. Naqvi	The use of mobile technology challenges and opportunities: a study of the shift from government to e-government to m-government with special reference to Oman	ICS	3100
74	Ahmed El-Bouri	Real-time scheduling in parallel machine systems	ICS	2600
75	Nazar Younis	A service quality measure for tourist destinations in Oman as episodes of a supply chain: a new basis for competitive measurements	HSS	4950
76	Gattoufi Said	Strategic orientation of tourism in Oman: the application of a modified Delphi approach and development of a working mechanism for a future tourism advisory board	HSS	4950
Year: 2009				
77	Almukhtar S. Al-Abri	Economic convergence and financial integration in the GCC region	HSS	4250
78	Rafi Ashrafi	The impact of information and communication technologies (ICT) on small and medium-sized enterprises (SMEs) in Oman	ICS	4900
79	Ghassan Ossman	The criteria for vision and mission statements of for-profit organizations in Oman	HSS	4999
80	Shafiqur Rahman	Age distribution and population projection in Oman	HSS	4800
81	Said M. Gattoufi	An on-line portal to assess the quality of service in Oman's hospitality industry	ICS	4950



Education

Education

No.	Principal Investigator	Title	Theme	Amount (RO)
Year: 1999				
1	Ali M. Yahya	Standardization of Raven's Progressive Matrices test in four major regions of the Sultanate of Oman	EDR	14000
Year: 2000				
2	Mohamed E. Osman	The effects of a computer-based learning to learn course on students' study and academic performance	ICS	3565
3	Reda Abu-Elwan	The effectiveness of a graphics calculator in teaching "functions and equations" for Omani prospective teachers	EDR	600
4	Samira M. Moosa	The general awareness of Omani children, parents and teachers as regards children's rights and the services provided for them	EDR	10000
Year: 2001				
5	Salha Abdullah Issan	Criteria for selecting university text books at Sultan Qaboos University: academic staff perspectives	EDR	1000
6	Abdullah M. Al-Sarmi	The development and standardization of a scholastic aptitude test	EDR	14600
7	Suad M. Sulaiman	The relationship between students' stress and different variables such as gender, college, level of study and GPA at Sultan Qaboos University	EDR	3000
Year: 2002				
8	Salha Abdullah Issan	EDR priorities in the Sultanate of Oman	EDR	3050
9	Hisham Ahmed Mohib	Body composition and level of physical fitness in sickle cell trait and sickle cell disease school children	LHS	10400
10	Suad M. Suleiman	The relationship between work values and senses variables of academics, administrators, technicians at Sultan Qaboos University	EDR	2300
11	Ali M. Kadim	The effect of cognimeter use on some cognitive and affective variables: an experimental study	EDR	3700
12	Fawzia Al Jamali	Scientific research at SQU: impediments and solutions	EDR	500
Year: 2003				
13	Salha Abdullah Issan	The efficiency of the school administration diploma program as perceived by graduates and their present principals/supervisors	EDR	5000
14	Hindawi Hafedh	Evaluation of the General Diploma in Education program at Sultan Qaboos University	EDR	2900
15	Samira M. Moosa	The general awareness of Omani children, parents and teachers as regards children's rights and the services provided for them	EDR	10000

Education

No.	Principal Investigator	Title	Theme	Amount (RO)
Year: 2004				
16	Samira M. Moosa	Designing an illustrated and pronounced vocabulary test for Omani five-six year old children	EDR	4450
17	Redha Abu-Elwan	Designing a mathematics education program based on "Information Technology" for the gifted students of Basic Education in the Sultanate of Oman	ICS	350
18	Mohamed E. Osman	Virtual tutoring in physics: an online environment for developing students' metacognitive problem-solving skills	ICS	1300
19	Sharifah S. Al-Said	Al-Muhathab wa Ain Al-Adab by Sheikh Mohammad Bin Amer Al-Ma'awali: a documentation study	EDR	3400
20	Omar Aidaroos Ba-Omar	Means of examining the Islamic Sharia intentions	EDR	900
21	Suad Mohamad Ali	The counseling needs of Sultan Qaboos University students	EDR	800
Year: 2005				
22	Salha Abdullah Issan	Academic accreditation at Sultan Qaboos University: a suggested system in the light of experience in some countries	EDR	5700
23	Hisham Ahmed Mohib	A study of anthropometric measurements and motor ability of students of the first cycle of the Basic Education system in Oman	LHS	3650
24	Ali Mahdi Kazim	Standardization of Raven's Coloured Progressive Matrices on Omani 5-11 year old children	EDR	12300
Year: 2006				
25	Adel Salama	A proposed system for extensive education at Sultan Qaboos University in the light of the actual needs of the Omani society	EDR	5000
26	Humaira S. Al-Suleimani	An evaluative study of a "Course and Teaching Survey" at Sultan Qaboos University	EDR	2400
27	Mahmoud M. Abdullah	Developing a battery of tests for selecting students newly-admitted to the Colleges of Education and Engineering at Sultan Qaboos University	EDR	12400
28	Ali Al-Zameli	A study to evaluate a school performance assessment project for the purpose of raising the quality of teaching, learning, and school management in all Omani schools	EDR	4500
Year: 2007				
29	Ali Anwar Amer	Omani university students' attitudes towards academic dishonesty	EDR	1400
30	Salim S. Al-Ghanboosi	The efficiency of Sultan Qaboos University's graduates	EDR	14500
31	Bassam Al-Omari	The relationship of research and educational development in the Sultanate of Oman as perceived by the faculty members of the College of Education at SQU	EDR	2200
32	Suad M. Sulaiman	The relationship between students' verbal and nonverbal communication and some variables at Sultan Qaboos University	EDR	1600
33	Ali Sherf	The effects of a learning objects supported inquiry-based online learning environment on students' learning outcomes	ICS	6180

Education

No.	Principal Investigator	Title	Theme	Amount (RO)
Year: 2008				
34	Salha Abdullah Issan	The causes of teachers' absence in relation to their attitudes toward teaching in the Sultanate of Oman	EDR	5000
35	Khalfan M. Al-Mandhari	Study and investigation of the first four volumes of the Almusanaf book	EDR	8300
36	Said S. Al-Dhafri	Developmental aspects and problems for Omani adolescents (12-18 years)	EDR	8600
37	Abdulhamid S. Hassan	Standardization of the Snijders-Oomen Non-verbal Intelligence Test (SON-R 5,5-17) for deaf children in the Sultanate of Oman	EDR	5000
38	Ali Ibrahim	Standardization of Raven's Advanced Progressive Matrices in an Omani sample	EDR	10000
39	Hussain A. Al-Kharusi	Traditional vs. computer-mediated approaches to teaching educational measurement	EDR	4500
40	Abdulqawi Al-Zubaidi	Identifying gifted students in Basic Education in Oman	EDR	22010
41	Muna A. Al-Bahrani	Child abuse among Oman's tenth and eleventh grades, in the light of gender, family income, educational state, age, and achievement variables	EDR	3150
Year: 2009				
42	Wajeha T. Al-Ani	The core values included in Oman's basic education philosophy and its educational practices in basic education schools	EDR	5200
43	Aisha Salim Al-Harhi	Entrepreneurship characteristics and their availability in the educational system as perceived by third secondary school students in the Sultanate of Oman	EDR	4600
44	Nariman M. Goma	The development of leaders' performance in higher education institutions in the light of Oman's total leadership approach	EDR	4300
45	Saleh S. Al-Busaidi	A longitudinal, experimental, and predictive study of novice teachers' performances and psychological characteristics in the Sultanate of Oman	EDR	25200
46	Alaa Sadik	The evaluation of an electronic grading book for faculty at the College of Education	EDR	1800



Engineering

No.	Principal Investigator	Title	Theme	Amount (RO)
Year: 1999				
1	Ali Salim Al-Harhi	The effect of aggregates used in Oman on concrete permeability	MAR	3000
2	Galal Abdalla Ali	The characterization of asphalt-pavement layer materials for response prediction, design and evaluation of flexible pavements in hot climates	MAR	17000
3	Ramzi Taha	The utilization of cement by-pass dust in Portland cement concrete and soil stabilization	MAR	2000
4	Amer Ali Al-Rawas	The Omani Sarooj project	MAR	5000
5	A. Shahalam	The management of solid waste disposal systems in Muscat	EBR	240
6	Abdul W. Hago	The development of lightweight concrete blocks with an emphasis on thermal insulation	MAR	2000
7	A. Shahalam	Testing an innovative aerobic fluidized-bed bio-film process to treat intermittent flows of oil-polluted wastewater generated in oil industries	IRR	1250
8	Mahesh D. Joshi	The set-up and development of a remote sensing and geographic information systems facility	ICS	20000
9	Ahmed M. Al-Naamany	The development of multimedia teaching tools	ICS	3000
10	Adel Gastli	The design and realization of an energy management controller for central ventilation and air-conditioning systems	ENR	2500
11	Adel Ahmed Ali	Converged networking: telecommunications for Oman 2020	ICS	2000
12	Ayman Elnaggar	Smart building management	ENR	1250
13	Khaled Ellithy	Energy saving by power factor correction with an emphasis on the power distribution network of SQU	ENR	2500
14	Arif S. Malik	The role of renewable energy for decentralized applications in the Sultanate of Oman	ENR	3000
15	Abdulnasser Hossen	A survey of electromagnetic-field emissions in close proximity to Omani radio broadcasting, television and mobile base-station antennas	ICS	2500
16	Afaq Ahmad	The application of Linear Feedback Shift Registers (LFSRS) theory to building up secure communication networks at SQU	ICS	2500
17	Ashraf A. Shikdar	Productivity and safety improvements in Omani industries	IRR	5400
18	Hilal Ali Al-Hinai	Micro-filtration membrane pretreatment for sea water reverse osmosis desalination	IRR	5400
19	Yousef Zurigat	A theoretical and experimental investigation of cooling techniques to improve thermal comfort in school buildings in Oman	IRR	5450
20	Ali Saud Al-Bemani	Recovering more oil from Omani oil fields	IRR	16250
Year: 2000				
21	Abdenour Seibi	Asphalt pavements in hot climates: characterization of layer materials and design - phase I	MAR	6720
22	Ayman Elnaggar	A power saving system: design, implementation, and testing on the SQU campus	ENR	8405

Engineering

No.	Principal Investigator	Title	Theme	Amount (RO)
23	Adel Gastli	A solar electric vehicle	ENR	8110
24	Sabah A. Al-Sulaiman	Experimental study of a liquid desiccant air dehumidifier for air conditioning processes	IRR	7911
25	Ashraf A. Shikdar	Worker productivity, occupational health, and safety improvements in Omani industries: an ergonomic approach	IRR	24665
26	Bassam Jubran	Drag reduction in multiphase flow in vertical and inclined pipes	IRR	16650
27	Saif Abdullah Al-Hiddabi	Numerical modeling of convective cells generated by side walls in solar ponds	ENR	12000
28	Ratan Raj Tatiya	Studies related to coal mining and its impact on the environment in the Sultanate of Oman	EBR	5700
Year: 2001				
29	Hossam Hassan	The use of open graded friction course (OGFC) mixes in Oman	MAR	5075
30	Khalifa Saif Al-Jabri	The use of Oman's copper slag as a cementitious material	MAR	3625
31	Ali Salim Al-Harthy	Evaluation of the social housing situation of the low-income group in Oman: a case study in Maabelah and Al-Khoud	HSS	3426
32	Ali Said Al-Nuaimi	Monitoring and predicting pavement temperatures in Oman	MAR	8520
33	Mohammed Halim	Preparation of a database and documentation for selected heritage structures in Oman	HSS	4232
34	Mohammed Ahmed	Voltage DIP improvement in the industrial power distribution network with an emphasis on the PDO network	ENR	3172
35	Tariq Jamil	Analysis and implementation of $(-I + j)$ - basic complex binary	ICS	6345
36	Hadj Bourdoucen	The modeling, analysis and testing of solar cell panels and photovoltaic DC-AC inverters	ENR	3172
37	Abdulnasser Hossen	Applications of subband transforms in the speech coding and modulation techniques of narrow band signals	ICS	1360
38	Ali M. Al-Lawati	Denoising medical images using wavelet transforms	ICS	2720
39	Mahmoud Meribout	Efficient hardware mapping over a reconfigurable, distributed and heterogeneous network	ICS	4500
40	Afaq Ahmad	The testability/reliability knowledge of digital systems through controllability and observability computation	ICS	3263
41	Ahmed M. Al-Naamany	The development of LAN and WAN educational platforms	ICS	3535
42	Ayman Elnaggar	Improving the performance of the local area network at SQU under multimedia traffic	ICS	2627
43	Biswanath Samanta	The development of an integrated system for machinery condition monitoring: diagnostics and prognostics	IRR	7160
44	Tasneem Pervez	The modeling and simulation of taper-taper joints in composites	IRR	12608
45	Michael J. Pegg	The development of an automated flammability and auto-ignition test apparatus	IRR	15367
46	Osman Satti	Studies related to multi-metal deposits in the Sultanate of Oman	ENR	4260
Year: 2002				
47	Hossam Hassan	Investigation into using petroleum-contaminated soils in highway construction	MAR	6080
48	Ramzi Taha	Waste generation and recycling in Oman: the feasibility of implementation	EBR	5610

Engineering

No.	Principal Investigator	Title	Theme	Amount (RO)
49	Yahia Mohamedzein	Assessment of Omani clays for use in landfill liners	MAR	5310
50	Ahmed Sana	Modeling the groundwater quality in the Al-Batinah plain, Sultanate of Oman	EBR	5045
51	Mohammed Y. Al-Aghbari	The use of desert sands in construction projects	MAR	4870
52	Mohammed Y. Al-Aghbari	The effect of oil spills on the hydraulic and geotechnical properties of soil	EBR	4675
53	Hadj Bourdoucen	Study, analysis and design of TDM and WDM optical networks	ICS	4010
54	Mohammed Habli	All Optical Wavelength Demultiplexing	FUR	3465
55	Afaq Ahmed	A study of the effectiveness of digital signature techniques for e-commerce and businesses	ICS	3260
56	Joseph Jervase	Modeling and generating contour maps for solar radiation and sunshine hours over Oman	ENR	2480
57	Mahmoud Meribout	A dynamic host and routing configuration for managing mobility between private wireless clients and public networks	ICS	1220
58	Abdunasir Hossen	Applications of subband transforms in image coding and the compression of biomedical signals	ICS	1025
59	Yousef Zurigat	Development of an eco-house for hot and humid climates	EBR	22680
60	O. Houache	A technoeconomic feasibility study of manufacturing yarn from recycled plastic	IRR	15270
Year: 2003				
61	Ali Said Al-Nuaimi	The design of reinforced and partially pre-stressed t-beams using the direct design method	MAR	9608
62	Salim Khamis Al-Oraimi	The use of high performance concrete for concrete pavements in Oman	MAR	5450
63	Khalifa Saif Al-Jabri	The development of lightweight concrete blocks using natural materials available in Oman	MAR	4118
64	Khaled Ellithy	The measurement and analysis of harmonics in SQU's electric power distribution network	ENR	7500
65	Faysal Mnif	A self-tuning solar energy irrigation system prototype	ENR	6700
66	Mohammed Abdu Salam	Derivation of creepage distance in terms of ESDD and the diameter of the contaminated insulator	ENR	4392
67	Arif Malik	Electricity tariffs based on long-run marginal costs for the interconnected power system of Oman	ENR	2000
68	Lazhar Khrijji	Old movies restoration	IRR	3640
69	Zia Nadir	Modeling a 3-D cavity with the help of TLM: a study on the influence of geometrical modification of the cavity	FUR	2000
70	Amer Salem Al-Yahmadi	Handling reasoning under uncertainty in multi-agent systems using the fuzzy logic development of a robot soccer team	ICS	4575
71	Sabah A. Al-Sulaiman	Elevated inversion layers and the Al-Khareef season in Salalah	EBR	4575
72	Ashraf A. Shikdar	Ergonomic workstation design for assembly work	IRR	4575
73	Saif A. Al-Hiddabi	Design and construction of a dish type sun-tracking solar collector	ENR	4575
74	Basma Yaghi	Removal of acid gases by alkanolamine solutions	IRR	11140
Year: 2004				
75	Ali Salim Al-Harthy	The properties of concrete made with recycled aggregates	MAR	1640

Engineering

No.	Principal Investigator	Title	Theme	Amount (RO)
76	Ahmed Salim Al-Futaisi	A laboratory investigation of the potential for using a local clay mineral (attapulgit) as a sorbent in the treatment of hydrocarbon polluted groundwater	EBR	8930
77	Abdullah Hilal Al-Saidy	Rehabilitation of concrete flexural members in Oman using fiber reinforced polymers	MAR	6240
78	Amer Ali Al-Rawas	Investigation of permeability and the leaching of construction applications containing oil-contaminated soils	MAR	5740
79	Ahmad Al-Jamrah	Soil and groundwater contamination due to underground storage tanks in the Sultanate of Oman	EBR	8520
80	Hossam Hassan	The recycling of reclaimed asphalt pavement in construction applications	MAR	7130
81	M. Abdel-Halim	Strengthening and repairing concrete columns using advanced composite materials	MAR	6260
82	Ramzi Taha	The use of palm fibers in civil engineering construction	MAR	7380
83	Abdullah H. Al-Badi	Minimizing the effect of AC induced voltage on pipelines located close to overhead transmission lines	ENR	3770
84	Lazhar Khrijji	Video authentication	ICS	910
85	Tariq Jamil	The design and implementation of arithmetic circuits for (-1 +j) - base complex binary number system	FUR	990
86	Afaq Ahmad	Digital system testing: study, effectiveness, measurement and implementation	ICS	2200
87	Biswanath Samanta	The development of an integrated system for monitoring and diagnosing of cavitation in fluid machinery	IRR	11880
88	Sameh Al-Shihabi	Evaluating and enhancing the application of industrial engineering methodologies within the Omani manufacturing and servicing sectors	IRR	3280
Year: 2005				
89	Khalifa Saif Al-Jabri	3-D finite element modelling beam-to-column connections at elevated temperatures	FUR	5500
90	Salim Khamis Al-Oraimi	Development, application and investigation of Self-Compacting Concrete (SCC)	MAR	7550
91	Mohammed Y. Al Aghbari	The use of dune sand in desert areas as a construction material	MAR	7068
92	Yahia Mohamedzein	The characterization and improvement of Sabkha soils in Oman	MAR	3148
93	Abdunasir Hossen	Different approaches to the classification of biomedical signals	ICS	1300
94	Arif S. Malik	Energy saving potential and its impact on power planning in the central grid of Oman using demand-side management	MAR	1000
95	Farid Touati	The behavioral modeling of optical and RF blocks for the rapid and efficient design of optical and RF systems for virtual prototyping	ICS	1780
96	Ashraf A. Shikdar	The development of Omani anthropometric data for the adult male population	HSS	4175
97	Sabah A. Al-Sulaiman	A feasibility study of fog water collection during the Al-Khareef season in Dhofar region	EBR	7800
98	Abdullah Al-Shabibi	Finite element modeling and an experimental study of stick-slip phenomena in the expandable tubular	IRR	5400
99	Amer S. Al-Yahmadi	A fuzzy logic-based navigation of a remotely operated vehicle	IRR	2800
100	Maki K. Rashid	Motion planning and errors in a 3D pipe inspection robot	IRR	3000
101	Jamil A. Abdo	Application of friction technology: the control of friction in brakes, clutches, bearings, and gears	IRR	4112

Engineering

No.	Principal Investigator	Title	Theme	Amount (RO)
102	Baba Jibril	Investigating a national capability of manufacturing activated carbon	IRR	14340
Year: 2006				
103	Ali Said Al-Nuaimi	Experimental investigation of the behaviour of beams encased in ferrocement hollow beam panels	MAR	10000
104	Ahmad Sana	Development and verification of a turbulence model for wave boundary layers	EBR	7650
105	Salah S. Mneina	Data communication system design and simulation	ICS	2000
106	Amer Ali Al-Rawas	Engineering characteristics of soils containing gypsum and anhydrite in Oman	MAR	9000
107	Khaled Hamed	Using neural networks for evaluating 3-D groundwater flow and contaminant transport in heterogeneous geological media	EBR	8900
108	Nazar Mohamed	The use of visually and digitally signed smart cards in Oman for secure communications	ICS	2250
109	Tariq Jamil	A investigation of the effects of multiple-bit shift operation on the binary representation of complex numbers	MAR	700
110	Khaled El-Metwally	The design and implementation of a sun-tracker for a solar power system	ENR	10000
111	Sayyad Z. Qamar	The modeling and simulation of extrusion pressure and die life for complex aluminum profiles	IRR	10000
Year: 2007				
112	Mohammed Y. Al Aghbari	Reinforcement of desert sands for use as a foundation-bearing soil	MAR	6300
113	Yahia Mohamedzein	The compressibility and shear strength of Al-Auzayba Sabkha soils	MAR	3780
114	Isaa H. Al-Harthy	Noise measurements in Muscat	EBR	6300
115	Hadj Bourdoucen	Design and performance evaluation of IP over WDM optical networks	ICS	5072
116	Lazhar Khrijji	Designing high-performance UWB receivers for smart-traffic control systems	ICS	4900
117	Faysal Mnif	The control and localization of underactuated ships	IRR	3962
118	Afaq Ahmad	The study of error detection and correction schemes for fault-tolerant memory systems	ICS	2268
119	Hamdi Bashir	An investigation of issues related to the implementation of ISO 9000 standards in Omani organizations	IRR	1386
120	Mohammed M. Khadem	Modeling, simulation and optimization in manufacturing systems	IRR	3654
121	Jamil A. Abdo	Smart wells technology for oil production optimization in Oman	IRR	6300
122	Tasneem Pervaz	Behavior-based control of a robotic-based navigation aid for the blind	LHS	5670
123	Khalifa Saif Al-Jabri	A feasibility study on using a solar hot water system in one of the government's referral hospitals in the Sultanate of Oman	ENR	4531
124	Baba Jibril	Selective catalytic oxidation of hydrogen sulfide for air pollution control	EBR	6300
125	Ilham Kirm	Levels of total mercury in traditional medicine, herbal remedies and generic pharmaceuticals available in Oman	LHS	3024
Year: 2008				
126	Khalifa Saif Al-Jabri	The use of car washing wastewater in concrete	MAR	5785
127	Khalid Salem Al-Shamsi	The evaluation of warm asphalt mixtures using local materials from Oman	MAR	5774
128	Abdullah Hilal Al-Saidy	Textile Reinforced Mortar (TRM) for strengthening concrete members	MAR	5728

Engineering

No.	Principal Investigator	Title	Theme	Amount (RO)
129	Mohammed Ould-Khaoua	The performance evaluation of flooding in wireless Mobile Ad Hoc Networks (MANETs)	ICS	2903
130	Farid Touati	Artificial intelligence techniques-based autonomous mobile robot navigation	ICS	4513
131	Adel Gastli	An automated cell connection optimizer for photovoltaic arrays	ICS	5438
132	Mahmoud Meribout	An embedded hardware architecture scheme for a low power and secure wireless sensor network in a dynamic environment	ICS	3035
133	Arif S. Malik	Automation cost/benefit study for a Muscat distribution system	ENR	2750
134	Abdulnasir Y. Hossen	Soft-decision wavelet technique: analysis and applications	FUR	3000
135	Ali M. Al-Lawati	Fiber optic sensing and integration into optical communications systems	ICS	4108
136	Khalid Alzebedeh	The characterization of progressive damage in polymer concrete composites	MAR	3707
137	Ashraf A. Shikdar	The design and fabrication of an ergonomically correct sit-stand computer workstation	IRR	4100
138	Nabeel Al-Rawahi	An experimental and computational study of different types of cyclone liquid-gas separators	IRR	4339
139	Mahmoud Tahat	A feasibility design study of a novel evaporative air cooler for space cooling for the Sultanate of Oman	IRR	4947
140	Sabah A. Al-Sulaiman	An experimental study of solar stills under Omani climatic conditions: inverted absorber solar stills for production of fresh water in remote areas	EBR	5785
141	Talal K. Al-Wahaibi	The effect of drag-reducing polymer on horizontal oil-water flow	ENR	4000
Year: 2009				
142	Hesham Eissa	Investigating daylight adequacy as one of the functional needs in old Omani citadels and forts	EBR	2263
143	Abdullah Hamed Al-Badi	DSP/microcontroller-based efficiency optimization of an induction motor	IRR	5225
144	Ali A. Al-Maqrashi	The design and modelling of a protection system for the SQU electrical power network	ENR	2116
145	Amer Saif Al-Hinai	Optimal VAR compensation for electrical distribution systems using particle swarm optimizations: application to the SQUH distribution network	IRR	5706
146	Asaad Elmoudi	Monitoring and diagnostics of power transformers	ICS	3334
147	Ayman Elnaggar	The design of an early warning flood detection system based on wireless sensor networks	LHS	4039
148	Hadj Bourdoucen	The design and testing of a sand detector	IRR	3142
149	Lazhar Khrijji	A wireless biotelemetry system for real time healthcare monitoring	LHS	3950
150	Zia Nadir	Designing highly efficient power amplifiers for the communication industry	ICS	4905
151	Hamdi Bashir	A study of productivity in the manufacturing sector of Oman	IRR	2116
152	Khalid Alzebedeh	Multi-scale modeling of polymer nano-composites	MAR	5129
153	Jamil A. Abdo	The design and construction of a nano and micro scale pin-on-disc testing machine	IRR	6027
154	Ilham Kirm	The production of hydrogen and hydrocarbons by dry reforming natural gas using nanocatalysts	IRR	4808
155	Adel Mohammed Al-Ajmi	The probabilistic approach to wellbore stability analysis	FUR	3206
156	Ibrahim Ashour	The green dearomatization of petroleum cuts	ENR	5129
157	Mansoor H. Al-Harthy	A stochastic integrated model for petroleum development projects	ENR	3847



Medicine and Health Sciences

Medicine and Health Sciences

No.	Principal Investigator	Title	Theme	Amount (RO)
Year: 1999				
1	Riad Bayoumi	Obesity in Oman	LHS	15300
2	Said A. Al-Yahyaee	Assessment of biochemical and genetic risk markers in Non-Insulin Dependent Diabetes Mellitus (NIDDM) patients with and without coronary heart disease	LHS	11000
3	Zakia M. Al Lamki	Decompression coring vs conservative therapy for avascular necrosis of the hip in sickle cell disease	LHS	9000
4	Ali Talib Al-Hinai	Oman-Heart: a national case control study to identify the risk factors for myocardial infarction in Omani populations	LHS	10150
5	Bazdawi M. Al-Riyami	Asthma and allergies in Oman	LHS	18500
6	Dirk T. O. Deleu	Epilepsy in Oman : a comprehensive research program	LHS	8250
7	Musbah Tanira	Pharmacogenetics as a tool for individualised therapy	LHS	9000
8	Mohammed Hassan	Physical fitness and fatness in Omani youths aged 6 - 21 years	LHS	4250
Year: 2000				
9	Ibrahim Inuwa	Is type IV autoimmune reaction involved in the pathogenesis of schizophrenia?	LHS	6800
10	Mehmet Simsek	Hereditary deafness in Oman	LHS	12000
11	Said A. Al Yahyaee	Clinical and genetic studies of recessive hereditary spastic paraplegia in Omani families	LHS	17000
12	Ali I. Al Bahrani	Assessment of the cardiovascular independent risk markers among Omani patients with non-insulin dependent Diabetes Mellitus and impaired glucose tolerance with established ischaemic heart disease	LHS	8800
13	Bazdawi M. Al Riyami	Asthma and allergies in Oman - part 2: trends of prevalence (ISAAC phase III)	LHS	9940
14	Euan Scrimgeour	Snake-bite survey in Oman	EBR	1000
15	Mohammed Idris	Epidemiology and prospects for the control of schistosomiasis in the Dhofar Governorate, Sultanate of Oman	LHS	11000
16	Ali A. Al-Jabri	The prevalence of different autoantibodies in the Omani population	LHS	7500
17	Mohammed Hassan	The role of consanguineous marriage in the transmission of hypertension to existing and future generations in Oman	LHS	16000
Year: 2001				
18	Riad Bayoumi	The epidemiology, genetics and management of obesity among Omanis	LHS	22000
19	Bente L. Kropf	The role of the MHC class I chain-related protein MICA in Behcet's disease	LHS	7500

Medicine and Health Sciences

No.	Principal Investigator	Title	Theme	Amount (RO)
20	Salam Salim Al-Kindi	HLA types predisposing to stroke in patients with sickle cell disease in Oman	LHS	7500
21	Anil Pathare	Immunological markers of Vaso-Occlusive Crisis [VOC] in Omani sickle cell patients	LHS	5000
22	David Dennison	Intravenous versus oral Busulfan in bone marrow transplantation for thalassemia	LHS	9000
23	Euan Scrimgeour	A study of Omani venomous snake venom and the development of polyvalent and monovalent antivenoms specifically for Oman	EBR	4500
24	Ali A. Al-Jabri	Knowledge, attitudes and behaviour towards infectious diseases among Omani medical students, non-medical students, health care personnel and others at Sultan Qaboos University	LHS	500
25	Muhannad F. Al Kobaisi	RN studies on some enterovirus isolates from Oman	LHS	3000
26	Andrzej Krolkowski	First trimester maternal serum-free beta human gonadotrophin (BHCG), pregnancy-associated plasma protein a (PAPP-A) and human placental lactogen (HPL) as predictors of poor pregnancy outcome	LHS	2000
27	Margaret Northway	Ranitidine and hypoglossal and phrenic motor neuron activity	LHS	1800
28	Amal M. Ziada	The effects of exercise and angiotensin converting enzyme inhibition on cardiac parameters: I. Left ventricular hypertrophy	LHS	6000
29	Sulayma A. Al-Barwani	The role of cerebrovascular potassium channels in hypertension	LHS	26200
Year: 2002				
30	Antony Colwell	The investigation of lead exposure in children with Attention Deficit Hyperactivity Disorder (ADHD)	LHS	7310
31	Roshan Lal Koul	A clinical and genetic study of spinal muscular atrophies in Oman	LHS	10000
32	Bazdawi M. Al-Riyami	Exhaled nitric oxide in Omani bronchiectatic patients and its role in the disease's activity	LHS	23000
33	Ali H. Al-Shirawi	Investigating the association of nitric oxide production and Systemic Lupus Erythematosus (SLE) activity in Omani patients	LHS	18000
34	Poovathoor Jacob	The molecular genetics of hereditary ataxias in Oman	LHS	10000
35	Zakria K. Al-Muharrmi	The reduction of HIV from blood by white (WBC) depletion	LHS	6450
36	Fadhil Mahdi	Enhancement of solar inactivation of Escherichia coli by titanium dioxide photocatalysis	LHS	4200
Year: 2003				
37	Mehmet Simsek	Attention Deficit Hyperactivity Disorder (ADHD) in Oman	LHS	9000
38	Mansour S. Al-Moundhri	Gastric cancer in Oman	LHS	40000
39	Radha Shenoy	The effects of sub-tenon's anesthesia on optic nerve function and morphology as measured by visually evoked potentials (VEP) confocal retinal tomography and laser doppler flowmetry (HRT/F)	LHS	22200
Year: 2004				
40	A. El Mardi	Structural and three-dimensional characterisation of the enteric nervous system ("The Abdominal Brain")	LHS	6100

Medicine and Health Sciences

No.	Principal Investigator	Title	Theme	Amount (RO)
41	Ibrahim M. Inuwa	Radiological anthropometry in Oman: a retrospective study on craniofacial and long limb bones	LHS	2400
42	Said A. Al-Yahyaee	Clinical and genetic studies of dominant familial temporal lobe epilepsy in Omani families	LHS	24100
43	Ibtisam Elnour	Clinical profile, pattern of infections and the molecular basis of Chronic Granulomatous Disease (CGD) in Oman	LHS	2600
44	Said H. Al Dhahry	Genotypic and immunological studies of HIV type 1 infection in Oman and the United Arab Emirates	LHS	36176
45	Yaseen M. Al-Lawatia	The frequency of anti-Candida albicans antibodies (IgG, IgA & IgM) and antigen in the Omani population	LHS	3500
Year: 2005				
46	Aly Abdelrahman	Cyclooxygenase-2 inhibitors and cardiovascular function	LHS	6300
47	Omar A. Al-Rawas	Patterns of b-adrenoceptor and 5-lipoxygenase genotypes among Omani asthmatic patients and their relation to drug response	LHS	17000
48	Amal Ziada	Non-invasive assessment of endothelial dysfunction in patients with sickle cell disease	LHS	2800
49	Sulayma A. Al-Barwani	Aging, exercise training and potassium channel remodeling: the role of coronary Ca ²⁺ -activated K ⁺ channels	LHS	20750
50	Mohammed Hassan	Haemodynamic and autonomic function in preeclampsia in Oman: a cross-sectional study	LHS	6550
Year: 2006				
51	Omar Habbal	Antimicrobial activity of <i>Lawsonia inermis</i> Linn (Henna)	EBR	3400
52	Mehmet Simsek	Attention Deficit Hyperactivity Disorder in Oman	LHS	12000
53	Abiaka Clifford	The in vitro use of taurine and its analogues to reduce reactive oxygen species formation and their application in oxidative-stress linked diseases	LHS	12750
54	Hamza Babiker	Molecular surveillance and genetic studies of endogenous and imported malaria in Oman	LHS	24600
55	Jumana Saleh	The acylation stimulating protein (ASP): a potent lipogenic factor and its association with obesity and related metabolic disorders in the Omani population	LHS	8700
56	Zachariah Mathew	Genetic polymorphism of the mannose-binding lectin gene in sickle cell disease patients: clinical correlation with the type and severity of infections	LHS	4600
57	Ibtisam Elnour	Clinical profile and molecular basis of severe combined immunodeficiency syndromes in Oman	LHS	10350
58	Sandy Raeburn	A study of the SMN1 exon7 deletion frequency in populations from two regions of Oman	LHS	14930
59	David Dennison	Targeted dose intravenous Busulfan in combination with Fludarabine and anti-thymocyte globulin as conditioning in bone marrow transplantation for high-risk homozygous beta thalassemia	LHS	6350

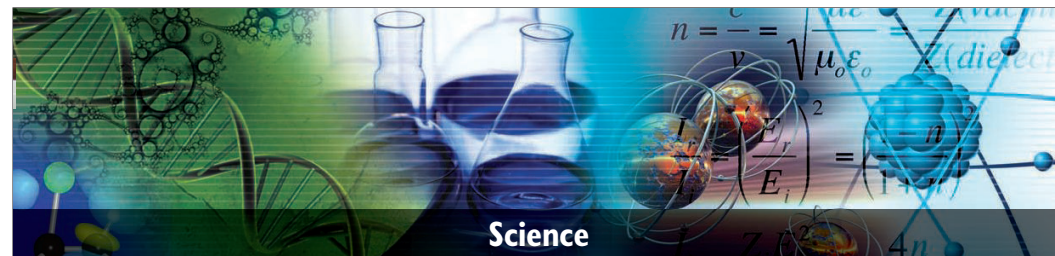
Medicine and Health Sciences

No.	Principal Investigator	Title	Theme	Amount (RO)
60	Ikram A. Burney	Lymphomagenesis in developing countries: a study of patient-related, environment-related, and disease-specific factors in Oman (LYMPHOMAN - 3)	LHS	20150
61	Mohammed A. Idris	Serological follow-up of emergent schistosomiasis in the Dhofar Governorate, Oman	LHS	8000
62	Rajeev Jain	Carcinoma cervix: diffusion-weighted MR imaging for assessment of tumour necrosis in response to radiotherapy, as a means to optimize and tailor treatment modality with reduction of morbidity	LHS	4500
Year: 2007				
63	Riad Bayoumi	Polymorphism of type 2 diabetes candidate genes among individuals of the "Oman Family Study"	LHS	13300
64	Said A. Al-Yahyaee	Mutational analysis of candidate genes for a novel severe hereditary spastic ataxia	LHS	21000
65	Hussein A. Al-Kindi	Pulmonary function test in patients with sickle cell disease (SCD) in correlation with hemoglobin S chain haplotypes	LHS	7300
66	Mansour S. Al-Moundhri	The epigenetics of gastric cancer in Oman and <i>Helicobacter pylori</i> genotyping	LHS	28000
67	Nicholas Woodhouse	Diabetes Mellitus in Oman: designing optimal management	LHS	13500
68	Alexander Bialasiewicz	Pseudoexfoliation glaucoma blindness in Oman	LHS	5000
69	Badreldin Ali El Hashmi	The effect of betaine administration on some biochemical, histological and physiological parameters in normal and spontaneously-hypertensive rats	LHS	25300
Year: 2008				
70	Nadia M. Al-Wardy	Genetic linkage mapping of recessive deafness in Oman	LHS	31300
71	U. M. Achandira	The cytogenetic and molecular characterization of chronic myeloid leukemia in Oman	LHS	5500
72	Ikram Ali Burney	Are cellular signaling pathways involved in the genesis of virus-associated lymphomas?	LHS	27700
73	Faryal Ali Khamis	Epidemiology and laboratory investigations of respiratory virus infections among Omani infants and young children at Sultan Qaboos University	LHS	18400
74	Mansour Al-Moundhri	BRCA 1 and 2 gene mutations, loss of heterozygosity, and methylation in familial and young sporadic breast cancer	LHS	14800
75	Ali Abdullah Al-Jabri	The study of antibodies and other immunological parameters to monitor the response of Omani patients with AIDS to highly active anti-retroviral therapy (HAART)	LHS	21800
76	Mohammed A. Al-Abri	Obstructive sleep apnoea/hypopnoea syndrome and metabolic vascular risk factors	LHS	5000
Year: 2009				
77	Clifford Abiaka	Evaluation of the vitamin D status of Omani adults with a particular focus on pregnant women	LHS	9000



Medicine and Health Sciences

No.	Principal Investigator	Title	Theme	Amount (RO)
78	Hamza Babiker	The brunt of mutations conferring drug resistance on the fitness of malaria parasites	LHS	18800
79	Hussein A. Al-Kindy	Integrative investigation and applied molecular epidemiology of cystic fibrosis in Oman	LHS	19900
80	Anil Pathare	Pharmacogenetic factors affecting warfarin dosing: rationale for prospective genetic screening before anticoagulation therapy	LHS	5400
81	Mansour S. Al-Moundhri	The ameliorative effect of cysteine prodrug L-2-oxothiazolidine-4-carboxylic acid on oxaliplatin-induced neurotoxicity in rats	LHS	7000
82	Sharankit Thukral	Detection and characterization of AmpC beta-lactamases in clinical isolates of Escherichia coli and Klebsiella spp	LHS	11000
83	Ahmed K. Al-Shukaili	The molecular and functional characterization of P2X7 gene coding polymorphisms in Omani patients with gastric cancer	LHS	11000
84	Mohammed A. Al-Za'abi	Fluorouracil-based chemotherapy in Omani patients: a pharmaco-genomic and kinetic overview	LHS	22000
85	Badreldin A. El-Hashmi	Renal hemodynamics in rats with cisplatin-induced nephrotoxicity: the influence of tetramethylpyrazine pretreatment	LHS	5700
86	Amal M. Ziada	The effect of <i>Hibiscus sabdariffa</i> on hemodynamics, myocardial structure and male reproduction in rats	LHS	19000
87	Haddia Bererhi	A safety profile and therapeutic use of black ink from Omani fishes in two experimental models of osteoporosis in rats	LHS	9000



Science

No.	Principal Investigator	Title	Theme	Amount (RO)
Year: 1999				
1	Ibrahim Mahmoud	Reproductive, physiological and endocrine studies of sea turtles in the coastal areas of Oman	EBR	4050
2	Majekodunmi Fatope	Bioassay-based discovery of anti-fungal and anti-bacterial agents	EBR	6150
3	Muhammed Khan	Rigid rod poly-yne polymers: design, synthesis, characterization and applications	FUR	14450
4	Musa S. Shongwe	Co-ordination complexes: model systems, macrocyclic compounds and transition metal catalysts	FUR	6600
5	Gregory H. P. Roos	Optimisation of the Baylis-Hillman reaction	FUR	5500
6	Avinash E. Pillay	Chemical studies on the solar irradiation of bilirubin	LHS	6400
7	Heiko Patzelt	Investigations of the biotechnological potential of halophilic archaea in Oman	EBR	1540
8	Timothy C. Corcoran	Characterization of poly-yenes for nonlinear optical applications	FUR	300
9	Khaled Day	Parallel and distributed computing on a cluster of workstations connected via a high-speed network	ICS	2780
10	Stefan Veldsman	Algebraic structures: analysis and applications	FUR	3050
11	Anton Purnama	Model studies for brine-water disposal from Oman's coastal desalination plants	EBR	1025
12	Nirmal C. Sachiti	Boundary layer flows of a class of non-Newtonian fluids	FUR	900
13	Tariq J. Cheema	Slope stability problems in Muscat area - a comprehensive approach	FUR	11150
14	Maxwell Dobson	Preliminary analysis of the exclusive economic zone, offshore Oman	HSS	3400
15	Carlo Carboni	A new principle for the control of the optical properties of liquid-crystal materials with v-shaped molecules	FUR	9100
16	Khalid Bouziane	Magnetic and oxide thin film technology	FUR	2105
17	Ahmed D. Al-Rawas	Magnetic multilayers and perovskites for magnetic sensors	FUR	3300
18	Azzouz Sellai	An investigation of losses and efficiency in inhomogeneous Schottky-based detectors with extension to grating textured MS and MIS solar cells	ENR	3200
Year: 2000				
19	Abdulaziz Y. Al-Kindi	The physiological and endocrine effects of some commercially viable fish species in the Sultanate of Oman in response to exposure to the water-soluble fraction (WSF) of Omani crude oil	EBR	8850
20	Elsadig A. Eltayeb	The effect of stress on the levels and ratio of glycaloids in plant tissues	EBR	1200
21	Annette E. Patzelt	Investigations of the germination behavior and the genetic variation in plants of northern and southern Oman	EBR	5000
22	Mohamed Aoudia	Optimum phase behavior of surfactant-water-oil systems: application in enhanced oil recovery and in the treatment of contaminated oilfield water in Oman	ENR	6800

Science

No.	Principal Investigator	Title	Theme	Amount (RO)
23	Salma M. Al Kindi	Analytical applications of molecular imprinted polymers to the analysis of pesticides in Oman	EBR	2010
24	Adnan Amin	A model for off-line recognition of unconstrained cursive handwriting	FUR	1400
25	Khaled Day	A pioneer high-performance computing infrastructure at SQU: set-up and applications	ICS	10800
26	Mehiddin Al-Baali	Developing and testing new numerical methods for nonlinear optimization	FUR	800
27	Michael Worthing	Tectonomagmatic evolution of the hydrocarbon basins of central Oman	ENR	6845
28	Samir Hanna	The mineral potential and tectonic setting of the Amqat (Lestwaenite) rocks in Oman	ENR	2500
29	A. M. Gimselseed	Studies of natural minerals from Oman and iron-bearing materials	ENR	30000
30	George Abraham	Dielectric studies of ferroelectric liquid crystals	FUR	6620
31	Mehmet Koca	The coxeter group H4, quasicrystals and E8	FUR	1100
32	El Sayed M. Osman	A theoretical study of the liquid-vapor and metal-nonmetal transitions in expanded liquid metals	FUR	1247
33	Khalid Bouziane	The synthesis optimisation of new materials	FUR	5300
Year: 2001				
34	Reginald Victor	The Oman bird record database	EBR	2600
35	Abdulkadir Elshafie	Aflatoxins in cow milk, human breast milk, urine, and the blood sera of patients and the aflatoxigenic mycoflora	EBR	7840
36	Abdulaziz Y. Al-Kindi	The physiological and endocrine responses of some commercially viable chicken species in the Sultanate of Oman to heat stress	EBR	4950
37	Heiko Patzelt	The biodegradation of Oman crude mineral oil in hypersaline environments	EBR	3960
38	Gregory H. P. Roos	The preparation and application of novel agents for asymmetric synthesis	FUR	6350
39	Hisham AbdulKhader	Chemical and biological investigations of four Omani plants used as fish poisons	EBR	9900
40	Timothy Corcoran	The characterization of poly-ynes for nonlinear optical applications and thermal stability	FUR	2200
41	Khaled Day	A web-based student advising system (WSAS)	ICS	6600
42	Khalil I. Shihab	Bayesian belief networks for assessing groundwater quality in the Sultanate of Oman	FUR	5080
43	M. Abdulghafour	Data fusion using fuzzy logic and genetic algorithms applied to signal processing	FUR	3400
44	Lakdere Benkherouf	Optimal control policies and optimal filters for stochastic inventory systems	FUR	1500
45	Messaoud Boulbrachene	The mathematical and numerical analysis of some problems related to control theory	FUR	1300
46	Qamar J. Khan	Prey-predator models with group defence	FUR	800
47	Saiful I. Zaman	Modified layer formulation of acoustic scattering problems and uniqueness of solutions	FUR	1700
48	Atsu S. Dorvlo	Birth interval estimation for Omani females	LHS	1860
49	Edamana Krishnan	Lie group of transformations for shallow water wave equations	FUR	760
50	Sanjiv K. Gupta	Extension of Fourier analysis to Lie groups	FUR	1800
51	Shamil Makhmutov	Banach spaces of analytic functions and operator theory	FUR	1600

Science

No.	Principal Investigator	Title	Theme	Amount (RO)
52	Mohammed Khan	Fixed point and KKM property	FUR	2100
53	Elsadig Hamza	Solution of model equations for nonlinear sand dune growth	FUR	5600
54	Mohammad Al-Saleh	Some variations of ranked set sampling	FUR	500
55	Sayyadul Arafin	A geophysical study of shallow subsurface features	FUR	6300
56	Khalid Bouziane	An investigation of magnetic thin films for magnetic recording	FUR	4500
57	Ram Singh	The phase stability and concentration fluctuations of helium-hydrogen mixture	FUR	2800
58	Mohamed Elzain	The corrosion behavior of construction steel under wet-dry cycle in Oman	MAR	6500
Year: 2002				
59	Muhammed Khan	Organometallic, organic and block copolymers for light emitting diodes and solar cells	ENR	6278
60	John Williams	The study of metal and metalloid accumulation by the date palm (<i>Phoenix dactylifera</i>) in Oman	EBR	2832
61	Fakhr Osman	Flow injection renewable surface assay using molecularly imprinted polymers	FUR	7410
62	Heiko Patzelt	Immonium salts with large anions as model compounds for the chromophore in the retinal proteins rhodopsin and bacteriorhodopsin	FUR	2550
63	E. Kudaish	Chemical sensors for biological and environmental applications	EBR	4250
64	M. Al Towaiq	Parallel implementation and comparative evaluation of Gauss-Jordan and Gauss-Huard algorithms in a cluster computing environment	ICS	1416
65	Bassel Arafeh	A duplication-based clustering technique for scheduling synchronous parallel programs on NOWS	ICS	1274
66	Abderezak Touzene	The design and evaluation of efficient and fault-tolerant communication methods in the generalized butterfly networks for parallel processors	ICS	2832
67	Haider Ali Al-Lawati	Facilitating the maintenance and re-engineering of relational databases using a software visualization-based framework	ICS	3210
68	Brian Gilding	A qualitative theory of degenerate second-order parabolic and hyperbolic partial differential equations	FUR	2879
69	Ibrahim Eltayeb	Modeling underground water flow in the Jabal Samhan Karst aquifer, Dhofar	FUR	9440
70	Stefan Veldsman	Algebraic structures: analysis and applications	FUR	3776
71	Pallath Chandran	Transient solutions of certain magnetohydrodynamic free convection flows	FUR	1605
72	Mehiddin Al Baali	Analyzing and improving quasi-Newton algorithms for large-scale optimization	FUR	2549
73	Samir Siksek	The Manin obstruction to the Hasse principle for curves	FUR	1746
74	Jasbir Manhas	Operators on spaces of analytic functions	FUR	2454
75	M. Boudelloua	The control of systems described by partial differential equations using a generalized state space model	FUR	1416
76	Zoltan Szabo	Investigation of numerical/functional analysis and statistics	FUR	840
77	Mubarik Ali	Geophysical modeling of the Sur area with special emphasis on the north Jalaan fault	ENR	3162
78	Tariq Cheema	The recharge potential of Khareef fogwater in the Salalah area	EBR	3255
79	Ahmed D. Al-Rawas	Experimental and theoretical studies of iron-4d systems	FUR	5664

Science

No.	Principal Investigator	Title	Theme	Amount (RO)
80	Rahman Sheikh	The structural and thermodynamic properties of alkali-based binary alloys	FUR	1416
81	Muataz S. Al-Barwani	The simulation of soft-core liquid crystalline polymers	FUR	4720
82	Azzouz Sellai	Electrical behavior and dimensional effects in copper/si and silicide/si systems	FUR	4720
83	Mehmet Koca	The irreducible representations of the Weyl Group E8 and its branching into the irreducible representations of its non-crystallographic Group H4	FUR	1416
84	Carlo Carboni	Investigation of the electro-optic response to low molar mass bi-mesogen organosiloxane liquid crystal	FUR	1588
Year: 2003				
85	Andrew Burton	Management of a population of leopard (<i>Panthera pardus</i>) subjected to professional trophy hunting in the Lake Natron game controlled area in Tanzania	EBR	7500
86	Annette E. Patzelt	Flora and vegetation of the monsoon woodlands of Dhofar, southern Oman	EBR	6400
87	Saleh N. Al-Busafi	Studies on the antioxidant activities of natural products isolated from Omani plants	EBR	9400
88	Musa Shongwe	The targeted synthesis of biologically relevant and potentially unique d-block complexes	FUR	4900
89	Mohamed Aoudia	Surfactant-enhanced solubilization and membrane processes in the treatment of Omani oilfield water	EBR	10550
90	Fawaz A. Masoud	Developing a framework for designing and implementing a sorting method for Arabic script	ICS	2300
91	Khalil Shihab	Automatic detection of performance bottlenecks using a case-based reasoning approach	ICS	2800
92	Brian Gilding	On optimal impulse control problems	FUR	1800
93	Meheddin Al Baali	An optimal self-scaling algorithm for unconstrained optimization	FUR	900
94	Kamel Nafa	Finite element stability and error analysis for some elliptic problems	FUR	2900
95	Qamar J. Khan	The stage-structured predator-prey model with predatory switching and optimal harvesting	FUR	570
96	Abderezak Touzene	A system for data security	ICS	3250
97	Abdulrazak S. Al-Sayigh	Biostratigraphy and environmental reconstruction of the Jurassic sediments of the northern Oman mountains	EBR	4030
98	Carlo Carboni	Bubble domains at the cholesteric to homeotropic-nematic transition in confined chiral nematic liquid crystals	FUR	3200
99	Sheikh Rahman	Electronic transport in non-simple liquid metals and their alloys	FUR	1000
100	Imaddin Al-Omari	Structural, magnetic, and Mossbauer studies of rare-earth [®] and transition-metals (T) compounds for the application of permanent magnets and magnetic recording at different temperatures	FUR	9000
101	El-Sayed Osman	The electrical resistivity of liquid metals under extreme conditions of temperature and pressure	FUR	2300
102	Salim H. Al-Harthy	Investigation of the SIMS surface transient and steady-state regions using MEIS	FUR	2500

Science

No.	Principal Investigator	Title	Theme	Amount (RO)
Year: 2004				
103	Abdulaziz Y. Al-Kindi	Comparative nesting behavior in relationship to circulating sex steroids, catecholamine and plasma physiological parameters in the green sea turtle, <i>Chelonia mydas</i> , at Ras Al-Hadd Reserve, Sultanate of Oman	EBR	4725
104	Salim H. Al-Rawahy	The effects of heavy metals and hydrocarbon pollutants on egg survival and production of stress hormones in the green sea turtle, <i>Chelonia mydas</i> at Ras Al Hadd, Sultanate of Oman	EBR	4725
105	Hamza Zidoum	Automated synthesis of constraint programs	ICS	2000
106	Khaled Day	Intranet-Based Desktop Supercomputing (IBDS)	ICS	3400
107	M. Ben Haj Rhouma	Desynchronize and cluster	FUR	400
108	Abdul Al-Soodinay	Manifolds and topological modelling	FUR	4600
109	Mehiddin Al-Baali	An interval for efficient self-scaling quasi-Newton algorithms	FUR	1000
110	Shamil Makhmutov	The value distribution of space quasi-meromorphic mappings	FUR	1650
111	E. Balakrishnan	Generic behaviour in a reduced model for the low-temperature oxidation of hydrocarbons in a continuously-stirred tank reactor	FUR	1500
112	A. Al-Harthy	The use of carbonate concretion as a tool to understand basin evolution	FUR	3620
113	Hugh Rollinson	The chemical and mineralogical characterisation of chromite from the Oman ophiolite: implications for magma genesis at oceanic spreading centres	ENR	9300
114	Muataz Al-Barwani	Simulation of drag on colloidal particles by a nematic-isotropic interface	FUR	1500
115	Imaddin Al-Omari	Vortex flux pinning in high Tc-superconductors	FUR	2600
116	Carlo Carboni	The occurrence of De Vries smectic a phases in low molar mass organosiloxane liquid crystals	FUR	2600
117	Abraham George	Phase transition studies in liquid crystals from density and interfacial tension measurements	FUR	13400
118	Faramarz S. Gard	The effect of atomic hydrogen as a surfactant and cleaning agent on semiconductor epitaxial growth	FUR	9900
Year: 2005				
119	Muna R. Al-Mandhary	New poly-dentate N- and NO-donor ligands and their coordination complexes	FUR	5000
120	Muhammad Khan	Ferrocenyl di-ynes and poly-ynes: synthesis, structure, electrochemistry and Mössbauer spectroscopy	FUR	12505
121	Osama Abou-Zied	Investigating the role of the proton transfer process in changing the genetic code and causing mutations in biological systems	EBR	4800
122	A. Abdesselam	Designing and implementing a content-based image search engine	ICS	3100
123	Haider Ramadhan	Improving the ranking capability of web search engines using heuristic-based hyperlink structure analysis	ICS	3140
124	Youcef Baghdadi	A reverse engineering process to generate web services through factual dependencies	ICS	2680
125	Atsu Dorvlo	Determinants of birth intervals in an urban and a rural community	LHS	2948
126	Mohammed S. Khan	Homotopic invariance for fixed points and applications	FUR	3500
127	Ibrahim Eltayeb	An experimental study of directionally solidifying fluid alloys	FUR	4100

Science

No.	Principal Investigator	Title	Theme	Amount (RO)
128	Stefan Veldsman	Convolution rings	FUR	1200
129	Qamar J. Khan	Eco-epidemiological models of Salton sea	EBR	3400
130	Majid Ali	Generalized GCD rings and modules	FUR	1600
131	Hamdi H. Al-Barwani	Modeling studies of brine waste disposal into the Arabian Gulf	EBR	3600
132	Ahmed Saleh	The quality of general education: a case study on Al-Seeb area	HSS	3320
133	Mehiddin Al-Baali	A comparison between the Wolfe and quasi-Newton conditions for nonlinear optimization	FUR	4900
134	Samir Karaa	High accuracy computation of convection diffusion equations on nonuniform grids	FUR	2950
135	Abdelaziz Maoouche	Diagonalization and spectrum-preserving maps in Banach Jordan systems	FUR	2000
136	Sebti Kerbal	Pseudo-differential nonlinear evolution equations	FUR	4850
137	Hugh Rollinson	Ion-probe dating of the earth's early continental crust	ENR	6800
138	Azzouz Sellai	The influence of annealing temperature and time on the structural and electrical properties of NiSi and similar silicides	FUR	14300
139	Saleh S. Shidhani	Quantification of the astronomical visibility and atmospheric conditions of Oman's mountains	EBR	4600
140	Khalid Bouziane	Investigation and conception of some multijunction photovoltaic cells and some oxide candidates for solar energy conversion and gas-sensing behaviour	ENR	7600
141	Mohamed S. Al-Busaidi	The structural, optical and electrical characterization of erbium implanted SiGe-based materials and iron-doped ReMnO ₃ manganites	ENR	10600
142	Mehmet Koca	Constructing finite sungroups of G ₂ from finite subgroups of So (4)	FUR	3400
Year: 2006				
143	Michael Robinson	Conservation genetics of selected Omani plants and animals	EBR	8340
144	Abdulkadir El Shafie	Thermophilic fungi in different habitats in the Sultanate of Oman	EBR	2800
145	Fatma M. Al-Barwani	The search for phytoalexins from some Omani indigenous plants	EBR	5650
146	Taher A. Ba-Omar	The effects of aspartame on different organs of mice embryos	EBR	2400
147	Khaled Melghit	The synthesis of nanosize mixed oxides based on tin: their application in photocatalysis	FUR	1340
148	Ja'afar K. Jawad	The synthesis of new platinum complexes and polymers by using phase transfer catalysis, and study of their biological effects	FUR	2400
149	Fakhr Suliman	The rapid assay of drugs in pharmaceutical formulations and biological fluids using microfluidic systems and fluorescence detection	FUR	3700
150	Abderezak Touzene	A parallel solver for large-scale Markovian models	FUR	1800
151	Khaled Day	Performance evaluation of routing protocols for mobile ad-hoc networks	ICS	3300
152	Medhat Rekha	Applications of basic hypergeometric series	FUR	1900
153	Ibrahim El Tayeb	The stability of the tearing mode	FUR	1800
154	Ziad Muhammad	The classification of plane symmetric Lorentzian manifolds according to their Ricci collineations	FUR	1850
155	Boudjemaa Anchouche	The Harder-Narasimhan reduction of a Higgs principle bundle over a smooth projective variety	FUR	1500
156	Brian Gilding	The effect of heterogeneity on nonlinear degenerate diffusion	FUR	1700

Science

No.	Principal Investigator	Title	Theme	Amount (RO)
157	Abdul Al-Soodinay	The topology of chromatin and DNA	EBR	1690
158	E. Balakrishnan	Improving water-quality: optimizing the performance of the activated-sludge process	EBR	1500
159	Nirmal C. Sacheti	Analytical investigations of some incompressible fluid flows bounded by porous media	FUR	1900
160	Abdelmadjid Amir	On the use of quasi birth-and-death processes in equilibrium selection in game theory and queuing networks	FUR	1650
161	Muhammed Ahmad	Statistical analysis of abnormal returns on the Muscat stock market	HSS	1900
162	Sanjiv K. Gupta	Extension of Fourier analysis on Lie Groups	FUR	1700
163	Abdul N. Darkal	Post-emplacement stress history in Oman's mountains	EBR	5500
164	Ahmed D. Al-Rawas	The preparation and characterization of strontium iron oxides	FUR	7540
165	Salim H. Al-Harhi	The surface preparation of InN using atomic hydrogen	FUR	3600
166	Sheikh M. Rahman	Thermo-electronic properties in non-simple liquid metals and their alloys	FUR	1150
167	Hisham M. Widadallah	Synthesis, structural, electric and magnetic characterization of cation-doped spinels and perovskites prepared by hydrothermal and mechanochemical techniques	FUR	6450
Year: 2007				
168	Aliya S. Al-Ansari	The molecular and functional characterization of P2X ₇ gene coding polymorphisms in Omani rheumatoid arthritis patients	LHS	3120
169	Abdulaziz Y. Al-Kindi	Hatching and emergence success in the green turtles, <i>Chelonia mydas</i> , at Ras Al-Hadd Reserve	EBR	3783
170	Muna R. Al-Mandhary	Dinuclear and polynuclear organoplatinum compounds incorporating acetylide-functionalized spacer groups	FUR	2496
171	Musa S. Shongwe	Electronic bistability: the design and development of spin-crossover molecular materials	FUR	4506
172	Wajdi Zoghaib	The synthesis and use of model base pair analogues for tautomerization studies in DNA and their role in biological mutagenesis	EBR	3510
173	Faizah Al-Mjeni	Transition-metal thiosemicarbazone complexes: reactivities, physicochemical properties and biological activities	FUR	3939
174	Yousef Baghdadi	A method of designing web services: towards the realization of service-oriented computing	ICS	2106
175	Shamil Makhmutov	A spherical derivative of meromorphic functions	FUR	1287
176	Jasbir S. Manhas	Weighted composition operators on spaces of analytic functions	FUR	1287
177	Edamana Krishnan	Elliptic functions methods for solving nonlinear evolution equations	FUR	1326
178	Qamar J. Khan	Mathematical modelling of the pulsatile release of hormones of the hypothalamus, the pituitary and the testis	FUR	1404
179	Mohammad S. Khan	Some applications of fixed point theorems to approximation theory	FUR	1326
180	Kamel Nafa	Pressure-stabilized finite element approximation for the generalized Stokes problem	FUR	1248
181	Mohamed Boudelloua	Computational aspects related to multivariate polynomial matrices	FUR	1170
182	Samir Karaa	High-order compact schemes with applications to a laminar diffusion flame problem	FUR	1365
183	Mehiddin Al Baali	Gradient methods and their applications to large-scale unconstrained optimization problems	FUR	2340

Science

No.	Principal Investigator	Title	Theme	Amount (RO)
184	Osman Abdalla	Seawater intrusion in two catchments from the Al Batinah region: a numerical simulation approach	EBR	4641
185	Hugh Rollinson	The genesis of the earliest Archaean continental crust: an analogue study from the trondhjemites of the Oman ophiolite	ENR	2964
186	Salah Al Khirbashi	The economic potentiality of laterites and associated listwanite in Oman	ENR	7527
187	Faramarz Gard	An investigation of Fermi surfaces of transition metal-chalcogenides, and metallic thin film, using synchrotron radiation	FUR	2769
188	A. Gismelseed	Investigations of Omani meteorites	FUR	5420
189	Mehmet Koca	Quaternions and polyhedra	FUR	1170
190	El-Sayed Osman	The surface properties of liquid metals	FUR	1755
191	Imaddin Al-Omari	The preparation and magnetic characterization of Co or Ni nanoparticles in granular CoCl ₂ -Co and NiCl ₂ -Ni heterostructures	FUR	7772
Year: 2008				
192	Abderezak Touzene	A performance evaluation of grid systems	ICS	1800
193	Bassel Arafah	Connection admission control algorithms with QoS constraints for handover calls in cellular wireless networks	ICS	3950
194	Hamza Zidoum	Towards a methodology for semi-automatic development of filtering algorithms for global constraints	ICS	4000
195	Khalil Shihab	Searching for frequent trees from XML documents	ICS	4350
196	Abdul Al-Soodinay	Topological aspects of abundance mapping	FUR	1700
197	Boumedine Chentouf	Contributions to the stabilization of some distributed parameter systems	FUR	1900
198	Imad Zaguia	Order preserving maps	FUR	1600
199	E. Balakrishnan	Improving the treatment efficiency of industrial wastewaters and slurries	EBR	1900
200	Majid Ali	Von Neumann regular modules	FUR	1500
201	M. Boulbrachene	On the finite element approximation in the L-norm of variational inequalities with non-linear source terms	FUR	1800
202	Mohamed Haj Rhouma	Eigenvalues and shapes	FUR	1750
203	Thomas Bier	On the interfaces of number theory, integer matrices and combinatorics	FUR	1500
204	Ifthikhar Ahmed	Unroofing the history of cretaceous Oman mountains as recorded in Al Khoud conglomerates: source discrimination and depositional setting of the Al-Khoud conglomerate formation, northern Oman	ENR	5120
205	Mubarik Ali	Geophysical modeling of the Sur area with special emphasis on the geology of Jalaan	ENR	8250
206	Oliver Weidlich	Middle permian - early triassic facies associations from Saih Hatat and Huqf area: a seismic-scale outcrop model for Khuff hydrocarbon reservoirs	ENR	8225
207	Khalid Bouziane	A magnetic and electrical study of manganese-implanted silicon carbide	FUR	4050
208	Mohammed Mamor	The optical, structural, and electrical properties of implanted GaN-based semiconductors	FUR	10200
209	Sheikh M. Rahman	The atomic transport properties and flow dynamics of carbon fluids	FUR	2250

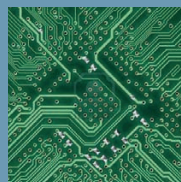
Science

No.	Principal Investigator	Title	Theme	Amount (RO)
Year: 2009				
210	Michael James Barry	The ecological role of nutrients in Omani wadis	EBR	5000
211	Raeid Abed	Oil bioremediation by cyanobacterial consortia under extreme environmental conditions	EBR	4500
212	Salma M. Al-Kindy	The development of novel coumarin labels for the HPLC analysis of amines and phenols	FUR	4900
213	Muhammad Salahuddin	Conjugated Pt(II) poly-ynes incorporating novel thiophene-based spacer groups	FUR	4950
214	Saleh N. Al-Busafi	The synthesis of substituted 8-hydroxyquinolines and studies of their photophysical and electrochemical properties	FUR	4750
215	Haider A. Al-Lawati	Towards a μ -total analytical system μ TAS (lab on a chip) for the determination of phenols and amines in water using coumarin-6 sulfonyl chloride (C6SCI) as a fluorogenic label	FUR	7600
216	Hamad H. Al-Mamari	Investigations of the olefin metathesis of vinyl halides	FUR	4600
217	Walid Abu-Dayyeh	On regression analysis with random regressors using bivariate ranked sampling	FUR	1900
218	Mehiddin Al-Baali	Sufficiently positive definite Hessian approximations for quasi-Newton methods	FUR	2200
219	Mohamed A. Al-Lawati	Characteristic methods for options pricing in finance	FUR	1500
220	Ahmad Al-Salman	A class of Marcinkiewicz integral operators with rough kernels	FUR	1900
221	Ziyad Al-Sharawi	Discrete population models with periodic and conditional harvesting strategies	FUR	1900
222	Nirmal C. Sacheti	Natural convection in a confined composite system comprising a fluid layer and a porous medium	FUR	1600
223	Tayfour El-Bashir	The numerical solution of flow generated by singularities	FUR	1800
224	Sanjiv K. Gupta	The extension of Fourier analysis on Lie groups	FUR	1700
225	Samir Karaa	Hybrid high order ADI schemes for unsteady convection diffusion problems	FUR	2250
226	Qamar J. Khan	Superpredator, mesopredator and prey interaction models and strategies to protect prey populations	FUR	1610
227	Jasbir S. Manhas	Weighted composition operators on function spaces	FUR	1500
228	Kamel Nafa	Local projection finite element stabilization for incompressible flow	FUR	1700
229	Abdullahi Umar	Ranks and products of quasi-idempotents in the symmetric inverse semigroup	FUR	1600
230	Mohammad Saeed	A study of commutativity theorems and derivations in rings	FUR	1700
231	Sebti Kerbal	Existence problems for non-local hyperbolic damped systems	FUR	1500
232	Imaddin Al-Omari	Structural and magnetic properties of the Fe _{0.75} -xSi _{0.25} Sbx alloy system	FUR	4100
233	Azzouz Sellai	Surface plasmon excitations in materials: probing some properties of liquid crystal	FUR	4800
234	Carlo Carboni	Investigation of ferro and anti-ferroelectric bi-mesogen low molar mass organosiloxane liquid crystal material presenting De-Vries smectic A phases	FUR	4100
235	Salim H. Al-Harhi	Tailoring the magnetic properties of nanocrystalline alloys for soft magnetic applications	FUR	5000



APPENDIX 8.3

Joint Grants



Joint Grants

Agricultural and Marine Sciences

No.	Principal Investigator - SQU	Principal Investigator - (Partner University)	Title	Theme	Partner University	Amount (RO)
Year: 2003						
I	Anvar Kacimov	Mohsen Sherif	Modeling of groundwater in two selected coastal aquifers of UAE and Oman as a precursor for water resources management	EBR	United Arab Emirates University	30,173
Year: 2004						
I	Farid Talukder	Walid Kaaka	Study of pesticide resistance and residue problems in Omani and UAE vegetable production	EBR	United Arab Emirates University	6,475
Year: 2006						
I	Farid Talukder	Jabir Al Dhehmani	Pesticide resistance and residue problems in Omani and UAE vegetable production, phase II: solution through rapid & molecular detection techniques and farmers awareness	EBR	United Arab Emirates University	12,375
Year: 2008						
I	Ahmed Al Alawi	Louis Laleye	Characterization of camel milk protein isolates as nutraceutical and functional ingredients	EBR	United Arab Emirates University	40,000
Year: 2009						
I	James S. Goddard	Kamaruzzaman Yunus	Heavy metal contamination of fish and shellfish	EBR	International Islamic University Malaysia	14,400

Commerce and Economics

No.	Principal Investigator - SQU	Principal Investigator - (Partner University)	Title	Theme	Partner University	Amount (RO)
Year: 2004						
I	Peter Oyelerere	Khalid Al Jifri	Determinants of effective corporate governance in states with varying ownership structures: an international comparison of emerging and western-like markets	HSS	United Arab Emirates University	7,525

Education

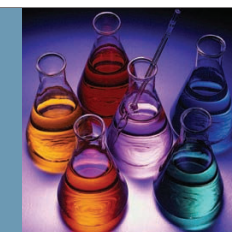
No.	Principal Investigator - SQU	Principal Investigator - (Partner University)	Title	Theme	Partner University	Amount (R0)
Year: 2009						
1	Mohamed Al Ghafri	Osman Al Sawae	Investigating the effect of implementing reform-based mathematics instruction on elementary students including students with learning difficulties in UAE and Oman	EDR	United Arab Emirates University	19,900
2	Ibrahim Al Qaryouti	Samir Dukmak	The assessment of readiness for educational inclusion in the United Arab Emirates and Sultanate of Oman	EDR	United Arab Emirates University	20,000

Medicine and Health Sciences

No.	Principal Investigator - SQU	Principal Investigator - (Partner University)	Title	Theme	Partner University	Amount (R0)
Year: 2003						
1	Muhammed Al Kubaisi	Norbert Nowotny	Molecular characterization of zoonotic and emerging viruses isolated in the UAE and in Oman – camelpox and rabies viruses	LHS	United Arab Emirates University	5,275
Year: 2007						
1	Muhammed Al Kobaisi	Yousef Abu Zeid	Epidemiology of hepatitis A in UAE and Oman: a study to assess the need for vaccination programs	LHS	United Arab Emirates University	40,000

Science

No.	Principal Investigator - SQU	Principal Investigator - (Partner University)	Title	Theme	Partner University	Amount (R0)
Year: 2005						
1	AbdelRahman Al Harthy	Bilal Saad Amireh	Comparison between the phanerozoic clastic sequence of SE Oman and NW Jordan Arabian peninsula	EBR	University of Jordan	5,580



APPENDIX 8.4 His Majesty's Trust Fund Grants

His Majesty's Trust Fund Grants

Agricultural and Marine Sciences

No.	Principal Investigator	Title	Theme	Year	Amount (RO)
1	Mahdi El-Mardi	Improvement of date palm production and date quality	EBR	2001	167,844
2	Stefan Kasapis	Fish product development for export and the local market	EBR	2002	97,500
3	Shyam Sablani	Seawater greenhouse development for arid climates: an innovative approach to water desalination and crop production	EBR	2002	88,666
4	Sanmugam Prathapar	Evaluation of greywater reuse potential for sustainable water resources management in Oman – Phase I	EBR	2003	97,000
5	Iqar Khan	Improving production of vegetable crops by development of stress tolerant germplasm and farming systems research	EBR	2004	74,800
6	Linus Opara	Postharvest technology to reduce losses and improve the quality and supply of fresh produce in Oman	EBR	2005	80,950
7	Bassam Soussi	Value-added marine raw materials and health	LHS	2005	150,000
8	Salim A. Al-Rawahy	The management of salt-affected soils and water for sustainable agriculture	EBR	2006	103,500
9	H. Esehie	The conservation and utilization of plant genetic resources in Oman	EBR	2007	139,300
10	Farid Talukder	The development of management strategies for pesticide resistance and pesticide residue problems in Omani agriculture	EBR	2007	81,950
11	Osman Mahgoub	The characterization, evaluation and conservation of indigenous animal genetic resources in the Sultanate of Oman	EBR	2008	80,000
12	Rashid A. Al-Yahyai	Rejuvenating lime and mango production in Oman: resolving current challenges	EBR	2008	100,000
13	Anesh Govender	Stock assessment of kingfish	EBR	2008	79,800
14	Mushtaque Ahmed	The feasibility of managed aquifer re-charge using excess treated wastewater in Oman	EBR	2009	85,000

Arts and Social Sciences

No.	Principal Investigator	Title	Theme	Year	Amount (RO)
1	Ahmed Abdusalam	Sand encroachment and its associated hazards on roads and settlements in the Sultanate of Oman	EBR	2002	21,800
2	Talal Y. Al-Awadhi	The use of geographical information systems and remote sensing to monitor and analyze urban growth in greater Muscat	EBR	2003	47,000
3	Salim M. Al-Hatrooshi	Coastal erosion in the Batinah	EBR	2004	69,050
4	Yassine Charabi	Urban climate and air pollution in Muscat city: multi-scale approaches	EBR	2007	59,000
5	Ibrahim Soghayroun	Sources of the history of Omani-East African relations 1624 – 1963: a critical and analytical study	HSS	2009	20,000

Centre for Environmental Studies and Research

No.	Principal Investigator	Title	Theme	Year	Amount (RO)
1	Reginald Victor	The Al Jabal al Akhdar Initiative – conservation and sustainable development in a fragile mountain ecosystem in Northern Oman	EBR	2004	65,850

Commerce and Economics

No.	Principal Investigator	Title	Theme	Year	Amount (RO)
1	Masudul A. Choudhury	A comparative study of economic development in the light of petroleum-related sectoral linkages and diversification: Oman, Saudia Arabia and Canada	HSS	2003	31,744

Education

No.	Principal Investigator	Title	Theme	Year	Amount (RO)
1	Moosa A. Al-Kindi	Development of a distance learning model	EDR	2005	103,900

Engineering

No.	Principal Investigator	Title	Theme	Year	Amount (RO)
1	Ahmed Sana	Assessment and modeling of the fate of oil spills in the coastal regions of the Sultanate of Oman	ENR	2002	73,250
2	Osman Sati	Modelling of the pollutant plume at Wadi Suq: a geo-statistical approach	EBR	2002	69,377
3	Ahmed M. Al-Naamani	The development of information technology training and a research infra-structure	ICS	2004	184,100
4	Ahmed M. Al-Futaisi	Environmental assessment of selected waste-dumping sites in Oman and risks for populations living in their vicinity: a case study - Barka and Bowsher	EBR	2004	94,350
5	Mahad S. Baawain	Investigating the applications of wastewater effluents and sludge: environmental risk or potential energy source?	EBR	2008	90,000

Medicine and Health Sciences

No.	Principal Investigator	Title	Theme	Year	Amount (RO)
1	Zakia M. Al-Lamki	Childhood acute lymphoblastic leukemia: molecular correlates of clinical outcomes: a comparison of Omani and American children	LHS	2001	270,000
2	M. Osman Hassan	Hypertension and the metabolic syndrome in Oman: intervention, clinical trial, and the mapping of genes	LHS	2001	278,000
3	Kamlesh Bhougara	Delaying the development of diabetes mellitus type 2 in Oman – "AMAL" study	LHS	2003	104,723

Medicine and Health Sciences

No.	Principal Investigator	Title	Theme	Year	Amount (RO)
4	M. Osman Hassan	Hypertension and the metabolic syndrome in Oman: intervention, clinical trial, and the mapping of genes	LHS	2004	165,500
5	Salam S. Al-Kindi	Newborn haemoglobinopathy carrier screening: towards comprehensive and improved patient care of sickle cell disease in Oman	LHS	2005	103,700
6	Sandy Raeburn	Family and genetic understanding of autosomal recessive diseases	LHS	2006	168,850
7	David Dennison	Establishment of a national facility in stem cell translational research for novel cellular-based therapies and tissue repair	LHS	2009	120,000

Science

No.	Principal Investigator	Title	Theme	Year	Amount (RO)
1	Majek Fatope	Bioactivity-driven chemical investigation of Omani biodiversity for medicinally and agronomically valuable compounds: the development of Omani natural products	MAR	2001	213,000
2	Salim H. Al-Harthy	Atmospheric corrosion maps and corrosion products of mild steel, copper, aluminum and zinc in Muscat	MAR	2002	140,452
3	Ashraf T. Al-Hinai	Investigation of the hydrogen-induced cracking of metals in aqueous media containing sulphide ions	MAR	2003	45,000
4	Mohamed Aoudia	Surfactants for enhanced oil recovery in Yibal reservoir conditions: product selection and evaluation	ENR	2004	35,950
5	Sobhi Naser	Diamond potentiality in the kimberlites of the Bataina nappes, Eastern Oman	IRR	2006	50,000
6	Osman Hersi	Surface and subsurface geological study of the mesozoic succession of the Jiza-Qamar (Dhofar) basin: implications for exploration potential of an overlooked hydrocarbon system	EBR	2007	45,655
7	Abdulkadir Elshafie	Microbial-enhanced oil recovery	ENR	2008	90,000
8	Haider A. Al-Lawati	Developing microfluidic systems for routine analysis of pharmaceutical samples	MAR	2009	80,000



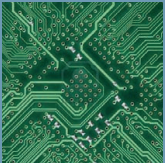
APPENDIX 8.5 The Research Council Grants



The Research Council Grants

TRC projects awarded to SQU in 2010

No.	Principal Investigator	Title	Theme	Amount (RO)
1	Riad Bayoumi	The clinical and genetic characterization of type 2 diabetes mellitus in Omanis	LHS	87,800
2	Ibrahim Inuwa	The effectiveness of flexible digital media platform in anatomy education	EDR	16,900
3	Salam S. Al-Kindi	The molecular genetics of alpha globin gene expression in the native Omani population: towards an understanding of the molecular basis of alpha thalassaemia and impact on clinical expression of beta thalassaemia and sickle cell disease	LHS	68,300
4	Badreldin Ali	The effect of gum Arabic on an animal model of chronic renal failure	LHS	50,000
5	Aisha H. Al-Shehi	A community genomic study of inherited neurological disorders in Oman	LHS	124,750
6	Akhtar J. Khan	Molecular characterization of the begomovirus associated with tomato and other crops and the screening of the tomato cultivars tolerant of leaf curl virus	EBR	132,000
7	Sergey Piontkovski	Oceanographic regime shift in the Sea of Oman	EBR	146,000
8	Ashraf Shikdar	Occupational health and safety issues affecting worker performance in Omani industries	IRR	97,550
9	Adel Gastli	Solar and wind energy prospects in Oman	ENR	152,900



APPENDIX 8.6

External Grants

External Grants

Engineering

No.	Sponsor	Title	Theme	Year	Amount (RO)
1	Petroleum Energy Centre, Japan	The treatment and utilization of Oman oil field water	EBR	1996	192,500
2	Petroleum Energy Centre, Japan	Pre-treatment for RO desalination plants - Phase I	EBR	1998	386,000
3	New Energy and Industrial Technologies Development Organization (NEDO), Japan (JPY)	The testing of Japanese solar panels under the prevailing weather conditions in Oman	EBR	1999	387,600
4	New Energy and Industrial Technologies Development Organization (NEDO), Japan (JPY)	Studies related to Mukhaizna oil viscosity	EBR	1999	179,447
5	Bavarian Centre for Applied Energy Research (ZAE Bayern) (Germany)	Small scale thermal water desalination systems using solar energy or waste heat	EBR	2000	156,104
6	UNESCO	Analysis, modelling, and testing of solar cells, panels, and photovoltaic DC-AC power inverters	IIRR	2001	1,737
7	New Energy and Industrial Technologies Development Organization (NEDO), Japan (JPY)	The development of unused high viscosity crude oil and its use as fuel in power generation	ENR	2001	162,866
8	Japan Cooperation Center, Petroleum (JCCP)	Evaluation and remediation of hydrocarbon contaminated groundwater and soil in the Sultanate of Oman	EBR	2001	1,298,731
9	Water Reuse Promotion Centre	Pre-treatment for RO desalination plants - Phase II	EBR	2002	1,400,000
10	Ministry of Economy, Trade and Industry (METI)	A feasibility study on the treatment and utilization of Oman oilfield water	ENR	2003	111,601
11	Japan Cooperation Centre, Petroleum (JCCP)	The evaluation and remediation of hydrocarbon contaminated groundwater and soil in the Sultanate of Oman	EBR	2005	439,085
12	Japan Cooperation Centre, Petroleum (JCCP)	The treatment and utilization of Oman oilfield water	EBR	2007	179,219
13	PMI (UK)	The design and optimization of high-speed optical modulators and systems	ICS	2009	22,000

Science

No.	Sponsor	Title	Theme	Year	Amount (RO)
1	PMI (UK)	Exploiting fullerene chemistry for new photovoltaic materials	MAR	2009	21,615



APPENDIX 8.7 Consultancy Services

Consultancy Services

Agricultural and Marine Sciences

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
Year: 1997					
1	Osman Mahgoub	Agriculture and Fisheries Development Fund	Effects of processing on the quality of local dried fish sardines and its utilization as animal feed	EBR	60,000
Year: 1998					
2	Iqar Khan	Ministry of Agriculture	Witches' Broom Disease of Lime (WBDL)	IRR	6,700
3	Mushtaque Ahmed	MEDRC	Investigation on the use of evaporation ponds	ENR	11,906
Year: 1999					
4	Mattheus Goosen	Middle East Desalination Research Centre (MEDRC)	Fouling reduction and performance improvement in seawater RO systems using capillary pretreatment technology	IRR	3,856
5	Hamed S. Al Oufi	Agriculture and Fisheries Development Fund	Management of Oman's kingfish fishery	EBR	271,000
Year: 2000					
6	H. Abdel Rahman	Petroleum Development Oman (PDO)	Reed-bed treatment and re-use of oil production water	EBR	12,666
7	Hamed S. Al-Oufi	Agriculture and Fisheries Development Fund	Elasmobranch fisheries of Oman	EBR	98,000
Year: 2001					
8	Mattheus Goosen	PDO	PhD research on reed beds	EBR	8,393
9	Mushtaque Ahmed	PDO	Assessment of brine disposal methods used in PDO-operated desalination plants	EBR	15,729
10	Mattheus Goosen	PDO	Production water clean-up and reuse: demonstration of high-value crop growth using solar dew technology	EBR	15,360
11	Mushtaque Ahmed	MEDRC	Assessment of the composition of desalination plant disposal brines	EBR	5,110
12	Shyam Sablani	MEDRC	Assessment of the innovative freezing-melting process for desalination of sea water in the Gulf countries	EBR	4,337
13	H. Abdel Rahman	PDO	Evaluation of a water saving high absorbency copolymer	MAR	996
Year: 2002					
14	Iqar Khan	University of Agriculture, Faisalabad, Pakistan	Somatic hybridization of citrus to breed Witches' Broom resistant lime	EBR	3,860

Agricultural and Marine Sciences

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
15	H. Abdel Rahman	PDO	International Conference on Soil and Groundwater Contamination and Cleanup in Arid Countries	EBR	12,257
16	Isam Kadim	Muscat Municipality	Evaluation of safety of poultry meat products in Oman	LHS	3,400
17	Mushtaque Ahmed	MEDRC	Assessment of the composition of desalination plant disposal brines	EBR	1,788
18	James S. Goddard	Agriculture and Fisheries Development Fund	Aquafeed development from by-catch	EBR	160,000
Year: 2003					
19	Iqar Khan	University of Florida, USA	Application for terpenes for the control of Witches' Broom Disease of Lime (WBDL)	EBR	9,071
20	Jennifer McIlwain	Agriculture and Fisheries Development Fund	An assessment of the grouper fishery of Oman	EBR	99,220
Year: 2004					
21	Slim Zekri	Ministry of Commerce and Industry	Roasted pits powder	EBR	1,041
22	Michel Claereboudt	Ministry of Commerce and Industry	Environmental impact assessment, choice of location and economic feasibility of a reef viewing vessel in the Damaniyat islands and Musandam	EBR	10,980
23	Osman Mahgoub	PDO	Evaluation of the quality of water, soil and Rhodgrass at Rahab Farm	EBR	5,180
Year: 2006					
24	Farid Talukder	UNESCO	Insecticide resistance in major agricultural insect-pests in Oman: Monitoring and management strategies	EBR	9,650
Year: 2007					
25	Akhtar J. Khan	Royal Court Affairs	Detection of Citrus Tristeza Virus (CTV) and other citrus pathogens by ELISA and PCR in citrus plantation of Royal gardens and farms	EBR	8,600
26	Mushtaque Ahmed	Masirah Sea Fish Products	Determination of heavy metals in fish products	EBR	180
27	Mushtaque Ahmed	Jaroor Establishment LLC	Determination of heavy metals in fish products	EBR	280
28	Mushtaque Ahmed	PDO	Assessment of PDO operated desalination and sewage	EBR	1,901
29	Mushtaque Ahmed	Al-Ainkawi Enterprises	Determination of heavy metals in fish products	EBR	320
30	Mushtaque Ahmed	Asmak Quriyat International LLC	Determination of heavy metals in fish products	EBR	410
31	Mushtaque Ahmed	Oman Fisheries Co. SAOG	Determination of heavy metals in fish products	EBR	1,200
32	Mushtaque Ahmed	Oman Fisheries Co. SAOG	Determination of heavy metals in fish products	EBR	400

Agricultural and Marine Sciences

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
33	James S. Goddard	Ministry of Fisheries Wealth	Integrated tilapia farming	EBR	3,300
34	S. Piontkovski	Agriculture and Fisheries Development Fund	Assessments of mesoscale physical-biological interactions along the coast of Oman	EBR	239,000
Year: 2008					
35	Mushtaque Ahmed	MEDRC	Boron pre-treatment for seawater and brackish water desalination	IRR	5,770
36	James S. Goddard	Ministry of Fisheries Wealth	Aquaculture regulatory framework study	EBR	1,200
37	Andrew Palfreman	Ministry of Fisheries Wealth	Wholesale fish market feasibility study	HSS	4,200
38	Andrew Palfreman	Fishtech Management Consultants, UK	Code of practice for financing investment in small-scale fisheries sector in Oman	HSS	2,940
39	Aaron Henderson	Agriculture and Fisheries Development Fund	Assessment of shark population movements, delineations and breeding grounds in the Sultanate of Oman	EBR	100,000
40	Mushtaque Ahmed	PDO	Feasibility study to upgrade the effluent water treatment and water disposal system at the PDO MAF terminal in Oman	EBR	16,189
41	Msafiri Mbaga	Agriculture and Fisheries Development Fund	Jabal Akhdar rose water production project	EBR	12,385
42	Michel Claereboudt	Agriculture and Fisheries Development Fund	Diversity, stocks and feasibility of sea-cucumber aquaculture in Oman	EBR	94,300
Year: 2009					
43	Houcine Boughanmi	Ministry of Fisheries Wealth	Policy options for Omani fish export to the GCC countries	HSS	1,540
44	Akhtar J. Khan	Royal Court Affairs	Detection of citrus Exocortis Viroid, Citrus Cachexia Viroid and citrus greening bacteria by PCR assays in citrus trees from Royal gardens and farms	EBR	7,500
45	Adnan R. Al-Azri	Agriculture and Fisheries Development Fund	Assessments of mesoscale physical-biological interactions along the coast of Oman as the basis for understanding the periodic fisheries losses	EBR	222,900

Arts and Social Sciences

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
Year: 2008					
1	Samir Hassan	UNICEF	Social participation of Omani women: current status and future	HSS	6,450
Year: 2009					
2	Yahya B. Al Mawali	Oman LNG	Evaluation of social investment program for LNG	HSS	19,600

Centres

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
Year: 2002					
1	Omar S. Al-Marzouqi	Ministry of Justice - Appellate Court	Case auditing consultation	EDR	2,000
2	Peter Homewood	PDO	Evaluation of safety of poultry meat products in Oman	LHS	57,900
Year: 2003					
3	Ahmed M. Al-Naamany	Shell Oman	CISCO CCNA Workshop	IRR	10,320
4	Ali Obaid Al-Majeeni	Muscat Securities Market	Restructuring of IT Department (MSM)	FUR	5,000
5	Zaki Muscati	PDO	SQU-PDO Souq	ENR	3,476
6	Samira Moosa	UNICEF	The Preparation of the Oman EFA Plan	EBR	11,000
7	Ahmed M. Al-Naamany	PDO	Simulation of part of PDO network for congestion evaluation	ICS	5,349
8	Fathi H. Boukadi	Petrogas	Butabul permit numerical simulation study	ENR	10,440
9	Peter Homewood	PDO	Support to western Huqf Shuaiba Fi	ENR	22,002
Year: 2004					
10	Issa El Hussain	Comprehensive Nuclear Test Ban Treaty Organization (CTBO)	Establishment of IMS Station A S074	EBR	81,591
11	Naseer M. Al-Riyami	OHI Telecommunications Co. LLC	Resolve of video server problem	ICS	1,500
12	Peter Homewood	PDO	Natih high resolution sequence stratigraphic framework: Integration outcrop analogues and core data	FUR	125,450
13	Issa El Hussain	PDO	Yibal microseismicity investigation	FUR	22,624
Year: 2005					
14	Ali O. Al-Mejeni	Ministry of Higher Education	The Student Information System	ICS	31,000
15	Ahmed M. Al-Naamany	Oman Refineries and Petrochemicals	Web Service Design Agreement	ICS	500
16	Ahmed M. Al-Naamany	Al Nawras	Web Service Design Agreement	ICS	1,650
17	Ahmed M. Al-Naamany	Omantel	Web Service Design Agreement	ICS	7,800
18	Andy Kwarteng	PDO	Bar Al-Hikman project	EBR	4,000

Centres

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
Year: 2006					
19	Andy Kwarteng	Bechtel and Co. LLC	Remote sensing analysis of the thermal environment of Sohar and surrounding	EBR	2,123
20	Ahmed M. Al-Naamany	Telecommunication Regulatory Authority	CCNA Local Academy Workshop	HSS	6,000
21	Ahmed M. Al-Naamany	Telecommunication Regulatory Authority	CCNA Local Academy Workshop	HSS	3,782
22	Ahmed M. Al-Naamany	Telecommunication Regulatory Authority	Oman tele centers survey proposal	ICS	6,020
23	Ahmed M. Al-Naamany	Ministry of Manpower	CCNA Local Academy Workshop	HSS	2,000
24	Ahmed M. Al-Naamany	Sohar University /	CCNA Local Academy Workshop	HSS	9,083
Year: 2007					
25	Ali Saud Al-Bemani	Shell Technology Oman	Understanding of three-phase flow during water alternating gas injection and other EOR techniques	ENR	20,385
26	Reginald Victor	PDO	Studies on the impact of effluent treatment plant effluent (ETP) on pelagic fish in Mina Al-Fahal, Muscat, Sultanate of Oman	EBR	13,984
Year: 2008					
27	Issa El Hussain	PDO	Yibal microseismicity monitoring, data processing and analysis of spatial and temporal distribution of events	ENR	76,131
28	Sanmugam A. Prathapar	Petrogas EandP	Accelerating evaporation from oil - production water ponds	ENR	5,040
29	Rashid S. Al-Maamari	PDO	Polymer technology for improved oil recovery in Oman fields	ENR	888,904
Year: 2009					
30	Ayman Elnaggar	Dar Al Atta'a	Developing an entrepreneurship program for low income women	HSS	6,200
31	Issa El Hussain	Ministry of Finance	Assess the risks of earthquakes in the Sultanate of Oman and mitigation	EBR	400,000
32	Ali M. Al-Lawati	Petrogas	The development of an ICT literacy program for children with chronic diseases during their hospitalization	ICS	2,000
33	Hadj Bourdoucen	Nawras	Study of electromagnetic radiation levels as practiced by EM radiating equipment installers and community perception	ICS	50,000

Commerce and Economics

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
Year: 2002					
1	U. Moideenkutty	Public Establishment for Industrial Enterprises	Review of planned changes in the organizational structure of public establishment for industrial estates	IRR	4,200
2	Asya M. Al-Lamky	PDO	Seismic motivational study	FUR	3,500
Year: 2006					
3	Raied Salman	Ministry of Commerce and Industry	Review of planned changes in the organizational Study on status and measures to improve implementation of Omanization in industry	HSS	10,200
4	U. Moideenkutty	Omantel	Assessing emotional intelligence	HSS	207
5	U. Moideenkutty	Occidental of Oman, Inc	Assessing emotional intelligence	HSS	120
Year: 2009					
6	Said M. Al-Muharami	Ministry of Justice - Appellate Court	Case consultation	HSS	9,000

Education

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
Year: 1998					
1	Salha Abdullah Issan	Oman LNG	Staff Housing: Social and cultural requirements and professional impact	HSS	15,000
Year: 2002					
2	Abdullah M. Al Samri	Ministry of Education	Data analysis for Ministry of Education	EDR	550
Year: 2003					
3	Samira M. Moosa	UNICEF	The awareness of Omani children, parents and teachers as regards children rights and services provided for them (2001-2005)	EDR	9,670
Year: 2006					
4	Ali Mahdi Kazeem	GASERC (Kuwait)	Vocational guidance in Arab Gulf countries (Phase I)	EDR	17,304
Year: 2008					
5	Ali Mahdi Kazeem	GASERC (Kuwait)	Vocational guidance in Arab Gulf countries (Phase 2)	EDR	40,000

Engineering

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
Year: 1995					
1	Ali Saud Al-Bemani	PDO	Studies related to Mukhaizna oil	ENR	7,600
Year: 1996					
2	M. Bennayoune	PDO	Characterisation of crude oil emulsions	ENR	7,600
3	Elias Kazar	Ministry of Electricity and Water	Water distribution project	IRR	27,625
4	M. Bennayoune	PDO	The impact of Oman LNG on the economy of the Sultanate	ENR	32,000
5	Abdulnour Seibi	PDO	Provision of finite element analysis	FUR	15,000
Year: 1997					
6	Galal Ali	Muscat Municipality	Investigation of skidding problems on the streets of Muscat	HSS	5,400
7	Ali Saud Al-Bemani	PDO	Reservoir simulation sensitivity study over horizontal well application in Lekhwair field	ENR	5,250
Year: 1998					
8	Hilal A. Al Hinai	MEDRC	Innovation concepts, VARI-RO solar powered desalting study	ENR	16,000
9	A. B. Shahalam	MEDRC	Zero-waste design development for small home-use RO units	EBR	15,116
10	Abdulnour Seibi	PDO	Phase I - Stress analysis of casings expansion/post expansionising finite element method	MAR	2,709
11	Saleh M. Al-Alawi	PDO	Use of ANN in deciding temperature of boil-ups	ENR	6,000
12	Abdulnour Seibi	PDO	Properties of GRE pipes under different environmental conditions	ENR	20,118
13	Yousif Zurigat	PDO	Modeling and field validation of oil-water flow	ENR	11,000
14	Ramzi Taha	PDO	The use of petroleum contaminate soils in asphalt paving mixtures	ENR	7,500
15	Ramzi Taha	PDO	Effect of minus #200 sieve soil fraction on sand equivalent, Atterberg limits, and swelling potential (Phase I)	ENR	3,150
16	Ramzi Taha	PDO	Effect of minus #200 sieve soil fraction on sand equivalent, Atterberg limits, and swelling potential (Phase II)	ENR	5,250
17	Ramzi Taha	PDO	Upgrading of low quality or inferior materials using cement stabilization	ENR	7,500
18	Abdulnour Seibi	PDO	Experimental investigation and numerical simulation of pipe running through curved holes	ENR	31,200
19	Fathi Boukadi	PDO	Study of fracture effect on Lekhwair field performance	ENR	6,000

Engineering

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
Year: 1999					
20	T. Babadagli	PDO	Investigations on the EOR	ENR	10,500
21	Khaled Ellithy	PDO	Software and training (CDEGS software)	ICS	14,197
22	Fathi Boukadi	PDO	Sahmah oil field simulation studies	ENR	18,639
23	Saleh M. Al-Alawi	PDO	Improving PDO's power system load forecasting	ENR	4,000
24	Fathi Boukadi	PDO	Technical review of the Dunga oil field	ENR	4,000
25	Ali Saud Al-Bemani	PDO	Studies related to Mukhaizna oil viscosity	ENR	4,584
26	Hilal A. Al Hinai	PDO	Innovation concepts, VARI-RO solar powered desalting study	ENR	1,890
27	Hilal A. Al-Hinai	PDO	Small scale thermal water desalination systems using solar energy or waste heat	ENR	2,916
28	Ramzi Taha	Oman Cement Company	Beneficial re-uses of cement by-pass dust	MAR	10,075
Year: 2000					
29	Fathi Boukadi	PDO	Sahmah reservoir simulation study	ENR	6,060
30	Abdulnour Seibi	PDO	Vibration analysis of GRE piping system and its fatigue characteristics under cyclic loading	MAR	6,950
31	Joseph Jervase	PDO	Purchase of software and training of relevant SQU staff for the Interferometry of Synthetic Aperture Radar Data (InSAR) to detect and measure subsidence due to oil and gas extraction. Deliver 3 re-processed InSAR images using existing data	ICS	12,255
32	Ramzi Taha	PDO	Use of non-fresh water in civil engineering construction	MAR	30,000
33	Fathi Boukadi	PDO	Lost circulation material as a mud loss control agent	MAR	110,117
34	Fathi Boukadi	PDO	Technical review of Oman oil fields	IRR	9,579
35	Khaled Ellithy	Ministry of Electricity and Water	Voltage stability security assessment	MAR	12,980
36	Khaled Ellithy	PDO	Electricity system simulation model and load flow studies from MEW and PDO interconnected system	IRR	15,270
37	Ali S. Al-Harthy	PDO	Potential use of dune sands and slag-cement in concrete	MAR	10,000
38	Ali Saud Al-Bemani	PDO	Peer review of two PDO gas fields	ENR	3,000
39	Ali Saud Al-Bemani	Ministry of Oil and Gas	Technical review of Oman oil fields	ENR	21,600
40	Fathi Boukadi	Oman Oil Company	Technical review of Dunga	MAR	4,000
41	M. D. Joshi	PDO	InSAR desktop study	IRR	2,292
Year: 2001					
42	Yousif Zurigat	PDO	Modeling and field validation of oil-water bottom water draw-off system	ENR	30,800
43	Khaled Ellithy	PDO	Electromagnetic interference on pipelines from power lines	IRR	14,297

Engineering

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
44	Khaled Ellithy	PDO	Overhead Transmission Lines (OHL) - Pipeline interference studies	IRR	25,000
45	Khaled Ellithy	PDO	Transient stability study for two new Qarn Alam ISO 70MW power generators	IRR	11,538
46	Saif A. Al-Hiddabi	PDO	Ultra-short radius drilling jetting systems: Dynamic analysis	IRR	46,750
47	Tasneem Pervez	PDO	Design and construction of first generation SQU solar car	IRR	36,670
48	Fathi Boukadi	PDO	Investigating ways to reduce uncertainty in generating relative permeability profiles	ENR	48,120
49	Khaled Ellithy	PDO	Using InSAR to detect and measure subsidence due to oil and gas extraction	IRR	7,656
50	Tasneem Pervez	PDO	Material degradation, stress analysis using GEA and fatigue characteristics of reinforced/un-reinforced thermoplastic pipes	MAR	16,800
51	B. Samanta	PDO	Mechanical testing, condition monitoring and dynamics of ESP's	IRR	78,260
52	Fathi Boukadi	PDO	Formation damage, prevention and mitigation (Phase I)	MAR	483,385
53	Adel Gastli	PDO	Failure identification and analysis of PDO HV motors	IRR	52,357
54	R. A. Siddiqui	PDO	Effect of interference fit couplings on mechanical properties of steel pipes and joints	MAR	8,400
55	Tasneem Pervez	PDO	Well-bore tubular expansion research	MAR	435,345
56	T. Babadagli	PDO	Investigation on the EOR possibilities for Yibal field	ENR	21,000
57	Bassam Jubram	PDO	Development of design criteria for energy efficient building in Oman	MAR	27,400
58	Ramzi Taha	PDO	Use of non-fresh water in flowable fill (slurry) applications	MAR	10,000
59	T. Babadagli	PDO	Investigations on matrix recovery during steam injection into Qarn Alam	ENR	45,900
60	Ali Saud Al-Bemani	Shimuzu Corporation	Department feedback and update on groundwater	MAR	1,162
61	Hadj Bourdoucen	UNESCO	Investigations on matrix recovery during steam injection into Qarn Alam field	ENR	1,330
Year: 2002					
62	Saif A. Al-Hiddabi	PDO	SQU booth design and construction - GEO 2002	IRR	10,000
63	Yousif Zurigat	NCR Canada, Institute of Chemical Process and Environmental Technology	Performance enhancement of spiral-wound modules by modifying fluid flow behavior - CFD studies	ENR	1,273
64	Yousif Zurigat	PDO	Surge analysis of multiphase pipe flow for manifold inlet line at Yibal greenfield and single station rationalization	ENR	5,143
65	Yousif Zurigat	PDO	Surge analysis of multiphase pipe flow for manifold inlet line at Yibal greenfield and single station rationalization	ENR	5,152
66	Saif A. Al-Hiddabi	Amiantit Oman	Carbon dispersion analysis	ENR	5,345

Engineering

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
67	Khaled Ellithy	PDO	Harmonics measurement and analysis for PDO electrical distribution networks	IRR	15,500
68	Mohamed Habli	PDO	Development of an oil/water level measurement device	IRR	57,500
69	Mohamed Habli	PDO	Development of a BS and W measuring device	IRR	27,100
70	B. Yaghi	PDO	Routine measurement of total mercury from liquid samples	ENR	54,410
71	B. Yaghi	PDO	Establishment of a mercury analysis laboratory at SQU	ENR	33,725
72	Fathi Boukadi	PDO	Mobilizing condensate in gas reservoirs - A numerical simulation study	ENR	57,600
73	Yousif Zurigat	PDO	Development of typical meteorological years for different climatic regions in Oman	EBR	15,420
74	Hossam Hassan	PDO	Beneficial reuses of petroleum-contaminated soils	EBR	40,000
75	Mohamed Habli	PDO	Development of an intelligent multi-sensor multi-phase flow meter	IRR	225,000
Year: 2003					
76	B. Samanta	Wood Group ESP (ME) Limited	Failure analysis of pump intake in an Electric Submersible Pump (ESP)	IRR	2,150
77	Ibrahim Metwally	Power Economy - Middle East Co.	Impulse testing on five identical, single-phase, 11 kV, 1.11 mH neutral earthing reactors of Power Economy Company	IRR	1,800
78	Tasneem Pervez	Composite Pipes Industry LLC	Testing of glass reinforced vinyl ester pipes	IRR	480
79	B. Samanta	Wood Group ESP (ME) Limited	Failure analysis of pump intake in an Electric Submersible Pump (ESP)	IRR	2,150
80	Ibrahim Metwally	Power Economy - Middle East Co.	Impulse testing on five identical, single-phase, 11 kV, 1.11 mH neutral earthing reactors	IRR	1,500
81	B. Yaghi	HMR (Environmental Engineering Consultants)	Analysis of total mercury in soil samples	EBR	700
82	Khaled Ellithy	PDO	Transient stability study for new power stations at Nimr and Yibal	IRR	9,650
83	Tasneem Pervez	PDO	Second generation SQU solar car project	IRR	23,255
84	Amer A. Al-Rawas	PDO	Evaluation of bearing capacity at Petroleum Development of Oman production sites	ENR	25,000
85	Ramzi Taha	PDO	Management of PDO's tank bottom sludges	ENR	47,300
86	Yousif Zurigat	PDO	Modeling and economic assessments of gas turbine exhaust gas energy utilization for inlet air precooling and/or cogeneration	IRR	22,920
87	Ahmed M. Al-Naamany	Omantel	Analysis of Oman GSM: Modeling and load forecasting	ICS	19,140
88	Abdullah H. Al Badi	PDO	Mitigation of AC induced voltage on pipeline located close to power line	IRR	15,826
89	Ali Saud Al-Bemani	PDO	Qarn Alam - pilot support	ENR	243,180

Engineering

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
Year: 2004					
90	Sabah A. Al Sulaiman	Ministry of Regional Municipalities, Environment and Water	Implementation plan for revision and updating of existing regulation and legislation on control and monitoring of ODS	EBR	1,153
91	F. Malkawi	The World Bank	Urban planner municipal management services	EDR	1,305
92	Ibrahim Metwally	Power Economy - Middle East Co.	Impulse testing on one single-phase, 11 kV, 170mH in rush current limiting reactor of Power Economy Company	IRR	300
93	Ibrahim Metwally	Power Economy - Middle East Co.	Impulse testing on single-phase, 11 kV, 1.11 mH neutral earthing reactor	IRR	450
94	Ibrahim Metwally	National Electrical Industries Co. LLC	Conducting standard tests on 12-k V load break switch and 12-kV fuse cut-out (drop-out fuse) at SQU high-voltage laboratory	IRR	1,500
95	Khaled Ellithy	PDO	Harmonic study for new UPS in computer room	IRR	1,154
96	Khaled Ellithy	PDO	Measurements of harmonics at Marmul MMPS substation-2	IRR	1,923
97	Ibrahim Metwally	Power Economy - Middle East Co.	Impulse testing on 16 No. single-phase, 1 kV, 450 A, 1.11 mH neutral earthing reactors	IRR	6,400
98	Abdullah H. Al Badi	PDO	132 kV power connection from national grid to Oman India Fertilizer Company SAOC (OMIFCO) - Mitigation of effects on buried pipeline located close to 132kV overhead line/cable	IRR	5,000
99	Ibrahim Metwally	Power Economy - Middle East Co.	Impulse testing on a single-phase, 33 kV, 630- A, 3.18 mH neutral earthing	IRR	1,000
100	Khaled Ellithy	PDO	QA ESP surface electrical equipment	IRR	38,609
101	Ibrahim Metwally	PDO	Stray-current corrosion study of PDO's well casings and ESP assemblies	IRR	80,770
102	Ibrahim Metwally	PDO	A study to eliminate 33kV and 132kV wooden pole fires	IRR	91,300
103	M. Meribout	PDO	Design and implementation of a new non-radioactive remote oil tank monitoring system	IRR	76,600
104	Khaled Ellithy	PDO	Harmonics study	IRR	7,692
105	Homoud K. Al-Hadrami	PDO	Formation damage prevention and mitigation (Phase II)	ENR	270,200
106	Rashid S. Al-Maamari	PDO	Abnormal viscosity behaviour of Mukhaizna crude at elevated temperature compared to crudes of similar API	ENR	16,060
107	Ahmed M. Al-Futaisi	PDO	Evaluation of clay content and investigation of boron absorption to clays in Nimar fields formation - Phase I	MAR	7,320
Year: 2005					
108	Amer S. Al Yahmadi	Oman Gas Company/ Oman Indian Fertilizer Co.	SQU English for kids initiative	EBR	1,500
109	Sabah A. Al Sulaiman	Kuwait Environment	Water conservation program in the GCC countries	EBR	1,132

Engineering

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
110	Ibrahim Metwally	Power Economy- Middle East Co.	Lighting impulse test on three, 3.18mH, 630A, 33kV neutral grounding reactors of Power Economy Company	IRR	2,800
111	Abdullah H. Al Badi	PDO	Safe separation distance between power line and pipeline	IRR	984
112	Khaled Ellithy	PDO	Harmonics measurement and analysis for VSD of a 4kW motor driving a chemical injection pump at Rima	IRR	5,000
113	Ibrahim Metwally	Power Economy- Middle East Co.	Lightning impulse test on two, 6.05mH, 630A, 33kV neutral grounding reactors of Power Economy Company	IRR	2,000
114	Majed A. Al Wadhahi	PDO	Nimr EOR identification: Phase II - Investigation of in situ combustion in Nimr type of oil reservoirs	ENR	113,098
115	Ali Saud Al-Bemari	PDO	Chemical Profile Control (CPC) project	ENR	424,600
116	Tasneem Pervez	PDO	Mechanical profile control: Performance of elastomer seals in open and cased holes	MAR	324,014
117	Khaled Ellithy	PDO	Transient stability study including 3x9E generators at Fahud	IRR	3,749
118	Khaled Ellithy	PDO	Transient stability study for new generators at Mukhaizna, Qarn Alam, Yibal, Sain Rawi and Harweel	IRR	5,792
119	Majed A. Al Wadhahi	PDO	Nimr EOR identification: Phase I	ENR	17,020
Year: 2006					
120	Sabah A. Al-Sulaiman	UNIDO	Training and awareness workshop in the solvent agent (CTC) sector: Oman	HSS	3,532
121	Homoud K. Al-Hadrami	PDO	Fracking job design	HSS	12,230
122	Ibrahim Metwally	Voltamp Transformers Oman	1500kVA, 11kv/433v single-ratio power transformer of VOLTAMP Transformers Oman Company	IRR	800
123	Sabah A. Al-Sulaiman	UNIDO	Organization Training and Awareness Workshop in the Solvents and Process Agents Sectors (CTC and TCA): Oman	HSS	3,530
124	Sabah A. Al-Sulaiman	UNIDO	Organization Training and Awareness Workshop in the Solvents and Process Agents Sectors (CTC and TCA): Oman	HSS	639
125	Yahya M. Al Wahaibi	PDO	Commercially available EOR and stimulation tools (Phase-I)	ENR	72,696
126	Yahya M. Al Wahaib	PDO	pH-sensitive polymers for novel improving reservoir sweep and conformance control applications (Phase-I)	MAR	132,700
127	Yahya M. Al Wahaibi	PDO	Experimental and numerical investigations into the effect of heterogeneity on oil recovery from immiscible, first- and multi-contact miscible gas injection (Phase I)	ENR	19,349
128	Yahya M. Al Wahaibi	PDO	Experimental and numerical investigations into the effect of heterogeneity on oil recovery from immiscible, first- and multi-contact miscible gas injection (Phase II)	ENR	83,078

Engineering

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
129	Khaled Ellithy	PDO	Yibal ESPs power quality study	IRR	34,615
130	Abdullah H. Al Badi	PDO	Guideline for pipeline installation close to overhead transmission lines	IRR	6,353
Year: 2007					
131	Ali Saud Al-Bemani	PDO	Addendum to Nimr EOR identification: Phase II - Investigation of in situ combustion in Nimr type of oil reservoirs	ENR	76,900
132	Mansoor H. Al Harthy	PDO	Crude export tanker scheduling (Phase I)	HSS	5,200
133	Talal K. Al Wahaibi	PDO	Technical evaluation of different production chemicals	ENR	26,923
134	Amer S. Al-Hinai	Occidental Oman, Inc	Power system study for Occidental Oman power network	IRR	46,320
135	Talal K. Al Wahaibi	PDO	Measurement of Glass Transition Temperature (TG) using deferent scanning calorimetry	IRR	50
136	Adel Gastli	PDO	Stray current study: Reality check and implementation stage	IRR	39,900
137	Adil M. Al-Ajmi	PDO	Feasibility study on installing a central mud plant for PDO oil fields (Phase I)	IRR	38,500
138	Mahmoud Abdel-Goad	PDO	Evaluation of non-intrusive hydro steel technique for detecting sour corrosion	IRR	18,458
139	Mahmoud Abdel-Goad	PDO	Evaluation of microcor advanced electrical resistance technique for corrosion monitoring	IRR	12,305
140	Amer S. Al-Hinai	Occidental Oman, Inc	Power system study for Occidental Oman grid	IRR	8,456
141	Ahmed M. Al-Naamany	Middle East College of Information Technology	CCNA Local Academy Workshop	ICS	1,000
142	Ahmed M. Al-Naamany	Ministry of Defence	CCNA Local Academy Workshop	HSS	1,008
143	Zahid Qamar	PDO	Material sharakterization of swelling elastomer	ENR	6,400
Year: 2008					
144	Yahya M. Al Wahaibi	PDO	Oil and water samples analysis and properties measurements (per sample)	ENR	1,397
145	Ibrahim Metwally	PDO	APT Transient Voltage Surge Suppressor (TVSS) test	IRR	5,000
146	Ahmed M. Al-Naamany	Microsoft	Evaluation of Microsoft's partners in learning program for the Ministry of Education in Oman	ICS	3,658
147	Adel Gastli	Daewoo Shipbuilding and Marine Engineering	Renewable energy business opportunities in Oman	HSS	15,364
148	Sabah A. Al-Sulaiman	UNIDO	Phase-out the consumption of hydro chlorofluorocarbons HCFC in Oman	IRR	5,306
149	Yahya M. Al Wahaibi	Awaqer L.L.C	Oil and water laboratory analysis (per sample)	ENR	100
150	Tasneem Pervez	PDO	Material characterization of swelling elastomer seals	MAR	105,676
151	Mahmoud Abdel-Goad	PDO	Detecting sour corrosion using different techniques	IRR	14,022

Engineering

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
152	Mahmoud Abdel-Goad	PDO	Detecting sour corrosion and evaluation of microcor advanced electrical resistance technique for corrosion monitoring	IRR	11,402
153	Adil M. Al-Ajmi	PDO	Technical assessment of mineralogical and chemical composition of produced solids/formation rock samples	ENR	70
154	Mansoor H. Al Harthy	PDO	Motivation and retention survey	HSS	3,000
155	Amer S. Al-Hinai	PDO	Stray current study: Reality check and Saih Rawl depletion compression project harmonic study implementation stage	ENR	28,950
156	Abdullah H. Al Badi	Mazoon Electricity	Losses reduction in abnormally and normally loaded distribution transformer	IRR	8,350
157	Amer S. Al-Hinai	Occidental Oman, Inc	Power system study for two additional solar turbines in Safah field	ENR	9,050
158	Homoud K. Al-Hadrami	PDO	Chemical profile control and formation damage support	ENR	319,550
159	Yahya M. Al Wahaibi	PDO	PVT measurement and analysis (Phase I)	ENR	387,526
160	Amer S. Al-Hinai	PDO	Kauther Phase 2 project: Harmonic study	ENR	30,000
Year: 2009					
161	Tasneem Pervez	PDO	Low cost expandable research	MAR	84,599
162	Nabeel Z. Al-Rawahi	PDO	Investigating the effectiveness of implementing a new design for crude oil degasser	ENR	189,600
163	Sabah A. Al-Sulaiman	MEDRC	Customer satisfaction survey for electricirty consumers in Oman	HSS	7,720
164	Zahid Qamar	PDO	Characterisation longevity testing of swellable elastomers	IRR	88,435
165	Amer S. Al-Hinai	Integrated Technology Services	Performance evaluation and optimization of the Barka MSF desalination	HSS	2,600
166	Amer H. Al-Habsi	Oman Telecommunications	CISCO local academy maintenance and training for MECOIT for academic year 2008/2009	ICS	3,200
167	Amer H. Al-Habsi	The Middle East College of Information Technology	CISCO local academy maintenance and training for MECOIT for academic year 2008/2009	ICS	1,000
168	Abdullah H. Al Badi	Authority for Electricity Regulation	Electromagnetic field measurements	IRR	9,950
169	Amer S. Al-Hinai	Petroface E and C Oman LLC	Harmonics measurements: Kauther Phase II	ENR	5,000
170	Nabeel Z. Al-Rawahi	PDO	Multiphase flow loop auditing by NEL: Phase I	ENR	6,800
171	Amer S. Al-Hinai	Occidental Oman, Inc	Power system study for block 9 electrical power network	IRR	66,500
172	Amer S. Al-Hinai	Muscat Electricity	Analysis and setting of protective devices at selected distribution feeders in Muscat Electricity Company network	IRR	15,950

Engineering

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
173	Ramzi Taha	Oman Refineries and Petrochemicals	Beneficial applications of spent catalysts and charcoal generated at Mina Al-Fahl and Sohar refineries	MAR	110,400
174	Mahmoud Abdel-Goad	Ministry of Justice - Appellate Court	Case consultation	ENR	2,500
175	Awni Shaaban	The Research Council	Master Plan of the Al-Khouth Valley Science and Technology Park	IRR	25,000
176	Mahad S. Baawain	PDO	Three-dimensional modeling of effluent disposal by marine outfall at MAF	EBR	18,826

Medicine and Health Sciences

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
Year: 2007					
1	Abdullah A. Al-Maniri	Karolinska Institute	The epidemiology of TB in Oman	LHS	2,500
2	Yasser Wali	Research Center at Oakland	Genetic predictors of stroke in patients with sickle cell disease	LHS	2,496
3	Shahina Daar	Darine Najem	An open label, multicenter trial on efficiency and safety of long term treatment with ICL670 10-20 mg/kg/day in betathalassemia patients with transfusion haemosiderosis	LHS	37,888
4	Zakia M. Al-Lamki	Radisson SAS	Enhancing the current understanding of the patterns behaviour and outcome of childhood all in Oman through the use of new scientific technologies	LHS	37,382

Science

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
Year: 2000					
1	M. A. Worthing	PDO	Review of igneous rocks of Oman	FUR	3,860
2	Petzelt Heiko	Occidental Oman, Inc	Degradation of crude oil by halophilic archaea (microorganisms)	EBR	9,300
Year: 2001					
3	Henk J. Droste	PDO	Elevation models for fault and fractures in carbonates	FUR	37,075
4	Mohammed H. Al-Wardi	PDO	Construction of geotraverses through Jebel Akhdar, Huqf, acquisition of data pertaining to fault and fracture relationships along traverses	FUR	28,235
5	Khidir M. Abdulbasit		Oman Social Indicators	ICS	400
6	Mubarak Ali	NESPAKP	Assessment of the innovative freezing-melting process or desalination of sea water in the Gulf countries	FUR	1,000

Science

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
7	Annette Patzelt	PDO	Plant assessment of the blow-out site in Zawliih	FUR	420
8	Heiko Patzelt	PDO	Microbiological assessment of the blow-out site in Zawliih	FUR	420
Year: 2002					
9	Abbasher M.	Oman Cement Company	Wiping test	MAR	400
10	Reginald Victor	Posford Haskoning	Bird list for Al Duqm/Oman bird record database	EBR	250
11	Heiko Patzelt	PDO	Monitoring of environmental restoration around Zawliih blow out site by SQU faculty	EBR	46,540
Year: 2003					
12	Reginald Victor	Five Oceans	Bird lists for Ras Al-Hadd area / Oman bird record database	EBR	142
13	Heiko Patzelt	PDO	Brackish water and landfarming in Lekhwair	EBR	40,100
14	Abdulkadir Elshafie	Fairleigh Dickinson University	SQU-Fairleigh Dickinson University and MEDRC	FUR	6,400
Year: 2004					
15	H. Rollinson	PDO	Cryogenic attachment for SEM-utilized as part of: formation, damage prevention, mitigation and removal of PDO project 2001-26	ENR	65,620
Year: 2005					
16	Abdulrahman A. Al-Harthy	PDO	Introduction to the petroleum geology of Oman	EBR	7,684
17	Annette Patzell	Sohar Aluminium	Assessment of relocation of species of the acacia tortilis woodland on the Batinah	EBR	1,176
18	Heiko Patzelt	Occidental Oman, Inc	Analytical chemistry services	FUR	12,200
Year: 2006					
19	Abdulrahman A. Al-Harthy	MOL	Introduction to the geology of the Hawasina window, Oman	FUR	23,731
20	Ali Yousef	The Research Council	Provision of administrative support services to The Research Council in the form of research assistants during the formulation of the Science and Technology policy of the Sultanate of Oman	HSS	37,000
21	Saif N. Al-Bahri	PDO	Microbial enhanced oil recovery (Phase I)	ENR	50,000
22	Heiko Patzelt	PDO	Hydrocarbon contamination survey around Zauliah	EBR	6,800
23	Abdulrahman A. Al-Harthy	PDO	Introduction to the petroleum geology of Oman	FUR	7,705

Science

No.	Principal Investigator	Sponsor	Title	Theme	Amount (RO)
Year: 2007					
24	Saif N. Al-Bahri	PDO	Microbial enhanced oil recovery (Phase II)	ENR	343,547
25	Ibrahim Y. Mahmoud	Ministry of Manpower	The effects of heat, and transportation as stress factors on some physical aspects of Omani goats	EBR	15,000
26	Mohamed H. Al-Wardi	Hawasina LLC	Qualitative characteristics of fracture system within mesozoic and tertiary sequences	FUR	4,899
Year: 2008					
27	Tabisam Khan	PDO	Gas fingerprint and geochemistry study - Saih Nigayda	ENR	32,420
28	Ali Yousef	The Research Council	Provision of administrative support services to The Research Council, in the form of consultant and research assistants during the initial phase of the implementation of the research strategy	HSS	77,700
29	Anton Purnama	Institute for Hydromechanik (IfH) University of Karlsruhe, Germany	Environmental planning, prediction and management of brine discharges from desalination plants	EBR	7,114
30	Mubarik Ali	Al Rawas Drilling LLC	Seismic refraction studies in Wadi Bani Ghaffer and Wadi Shafan	FUR	20,000
31	Aliya S. Al-Ansari	Ministry of Manpower	The detection of GMOs in food using molecular techniques and consumer attitudes to GM Foods in Oman (Master Grant)	HSS	1,900
32	Mohammed Aoudia	PDO	Feasibility study for using surfactants as an EOR option for Lekhwair field in Oman	ENR	41,445
33	Atsu Dorvlo	Oman Mobile	Attitude towards mobile/ phones among adolescents / young adults in second and third-cycle schools in Oman	HSS	12,700
Year: 2009					
34	Sobhi J. Nasir	National Mining Company LLC	XRD identification of sulphide minerals	ENR	450
35	Abdulrahman A. Al-Harthy	Rasyat Al-Rayan	Mineralogical identification of clays for Econ	ENR	1,000



RESEARCH AT SULTAN QABOOS UNIVERSITY



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